



BRISTOL BAY SOCKEYE SALMON (Oncorhynchus nerka) 1974

A Compilation of Catch and Escapement Data

**Compiled and Edited by:
Paul Krasnowski and Richard Randall**

1976

**ALASKA DEPARTMENT OF FISH AND GAME
Support Building, Juneau, Alaska 99801**

**James W. Brooks
Commissioner**

ADF&G TECHNICAL DATA REPORTS

This series of reports is designed to facilitate prompt reporting of data from studies conducted by the Alaska Department of Fish and Game, especially studies which may be of direct and immediate interest to scientists of other agencies.

The primary purpose of these reports is presentation of data. Description of programs and data collection methods is included only to the extent required for interpretation of the data. Analysis is generally limited to that necessary for clarification of data collection methods and interpretation of the basic data. No attempt is made in these reports to present analysis of the data relative to its ultimate or intended use.

Data presented in these reports is intended to be final, however, some revisions may occasionally be necessary. Minor revision will be made via errata sheets. Major revisions will be made in the form of revised reports.

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TABLE OF CONTENTS

	Page
LIST OF TABLES.....	i
LIST OF FIGURES.....	v
INTRODUCTION.....	1
BRISTOL BAY FISHERY, 1974.....	3
SUMMARY OF BRISTOL BAY CATCH AND ESCAPEMENT.....	6
BRISTOL BAY EMERGENCY ORDER FISHING PERIODS.....	10
SUMMARY OF THE 1974 SEASON FOR THE NAKNEK-KVICHAK DISTRICT.....	11
SUMMARY OF THE 1974 SEASON FOR THE EGEGIK DISTRICT.....	28
SUMMARY OF THE 1974 SEASON FOR THE UGASHIK DISTRICT.....	36
SUMMARY OF THE 1974 SEASON FOR THE NUSHAGAK DISTRICT.....	41
SUMMARY OF THE 1974 SEASON FOR THE TOGIAK DISTRICT.....	67
MEAN WEIGHTS FOR SOCKEYE SALMON IN CATCH SAMPLES.....	75
LITERATURE CITED.....	76
APPENDIX.....	77

List of Tables

	Page
Table 1. Bristol Bay sockeye salmon inshore return, by river, 1974...	6
Table 2. Bristol Bay sockeye salmon return, age group by river system, 1974.....	7
Table 3. Bristol Bay sockeye salmon return, age group by river system, percent, 1974.....	8
Table 4. Bristol Bay sockeye salmon return, ocean age by river, number and percent, 1974.....	9
Table 5. Bristol Bay emergency order fishing periods by district, 1974.....	10
Table 6. Naknek-Kvichak District inshore run of sockeye salmon, age group by sex, number and total percent, 1974.....	14
Table 7. Kvichak River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	15
Table 8. Branch River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	16
Table 9. Naknek River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	17
Table 10. Naknek sub-district commercial catch of sockeye salmon, sex composition by sample period, 1974.....	18
Table 11. Naknek sub-district commercial catch of sockeye salmon, age group by sample period and sex, number and percent, 1974	19
Table 12. Kvichak River daily sockeye salmon escapement counts, 1974..	20
Table 13. Kvichak River escapement of sockeye salmon, sex composition by sample period, 1974.....	21
Table 14. Kvichak River escapement of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	22
Table 15. Branch River daily sockeye salmon escapement counts, 1974...	23
Table 16. Branch River escapement of sockeye salmon, sex composition by sample period, 1974.....	24
Table 17. Naknek River daily sockeye salmon escapement counts, 1974...	25
Table 18. Naknek River escapement of sockeye salmon, sex composition by sample period, 1974.....	26

List of Tables

	Page
Table 19. Naknek River escapement of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	27
Table 20. Egegik River catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	31
Table 21. Egegik District commercial catch of sockeye salmon, sex composition by sample period, 1974.....	32
Table 22. Egegik River daily sockeye salmon escapement counts, 1974....	33
Table 23. Egegik River escapement of sockeye salmon, sex composition by sample period, 1974.....	34
Table 24. Egegik River escapement of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	35
Table 25. Ugashik River catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	38
Table 26. Ugashik River daily sockeye salmon escapement counts, 1974....	39
Table 27. Ugashik River escapement of sockeye salmon, sex composition by sample period, 1974.....	40
Table 28. Nushagak-Igushik District inshore run of sockeye salmon, age group by sex, number and total percent, 1974.....	44
Table 29. Igushik River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	45
Table 30. Snake River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	46
Table 31. Nuyakuk River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	47
Table 32. Nushagak-Mulchatna River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	48
Table 33. Nuyakuk River apportioned catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	49
Table 34. Nushagak-Igushik District commercial catch of sockeye salmon, sex composition by sample period, 1974.....	50
Table 35. Nushagak-Igushik District commercial catch of sockeye salmon, age group by sample period and sex, number and percent, 1974..	51

List of Tables

	<i>Page</i>
Table 36. Igushik Beach Sub-district commercial catch of sockeye salmon, sex composition by sample period, 1974.....	52
Table 37. Igushik Beach Sub-district commercial catch of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	53
Table 38. Igushik River daily sockeye salmon escapement counts, 1974.....	54
Table 39. Igushik River escapement of sockeye salmon, sex composition by sample period, 1974.....	55
Table 40. Igushik River escapement of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	56
Table 41. Snake River daily sockeye salmon escapement counts, 1974.....	57
Table 42. Snake River escapement of sockeye salmon, sex composition by sample period, 1974.....	60
Table 43. Wood River daily sockeye salmon escapement counts, 1974.....	61
Table 44. Wood River escapement of sockeye salmon, sex composition by sample period, 1974.....	62
Table 45. Wood River escapement of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	63
Table 46. Nushagak-Mulchatna River escapement of sockeye salmon, sex composition by sample period, 1974.....	64
Table 47. Nuyakuk River daily sockeye salmon, escapement counts, 1974.....	65
Table 48. Nuyakuk River escapement of sockeye salmon, sex composition by sample period, 1974.....	66
Table 49. Togiak River catch and escapement of sockeye salmon, age group by sex, number and percent, 1974.....	69
Table 50. Togiak District commercial catch of sockeye salmon, sex composition by sample period, 1974.....	70
Table 51. Togiak District commercial catch of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	71
Table 52. Togiak River daily sockeye salmon escapement counts, 1974.....	72
Table 53. Togiak River escapement of sockeye salmon, sex composition by sample period, 1974.....	73

List of Tables

	Page
Table 54. Togiak River escapement of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	74
Table 55. Mean weights by age class for sockeye salmon in the catch samples, Bristol Bay, 1974.....	75
Appendix Table A-1. Nushagak-Mulchatna tower escapement of sockeye salmon, age group by sample period and sex, number and percent, 1974.....	78
Appendix Table A-2. Nushagak-Mulchatna River system estimated escapement of sockeye salmon, age group by sex, number and percent, 1974.	79

List of Figures

	Page
Figure 1. Approximate locations of catch sampling and counting towers, Bristol Bay, 1974.....	5
Figure 2. Naknek-Kvichak District commercial fishing boundaries, 1974.....	13
Figure 3. Egegik District commercial fishing boundaries, 1974.....	30
Figure 4. Ugashik District commercial fishing boundaries, 1974.....	37
Figure 5. Nushagak-Igushik District commercial fishing boundaries, 1974.....	43
Figure 6. Togiak District commercial fishing boundaries, 1974.....	68

INTRODUCTION

This publication is the twelfth in a series intended to present annual catch and escapement statistics for the Bristol Bay sockeye salmon fishery.

Personnel of the Alaska Department of Fish and Game, Division of Commercial Fisheries collected all data and aged all scales for both the catch and escapement. Final harvest data was compiled from fish tickets by the statistics section. Age-weight-length (AWL) data, collected by field crews was key-punched by the Division of Data Processing, Alaska Department of Administration. Final compilation and tabulation of catch, escapement and AWL data was accomplished by Jerry Hautamaki of the University of Washington Computer Center in Seattle under contract to the Alaska Department of Fish and Game.

METHODS AND MATERIALS

Much of the data used in this report were collected by field crews and catch samplers stationed at counting towers and selected canneries throughout Bristol Bay. Figure 1 shows the approximate location of these projects.

Tower crews collected daily samples using beach seines. Cannery samplers obtained their samples as fish were unloaded from scows. Catch sample sizes were based on statistical analysis of past sampling efforts which indicated that a 600-fish sample per fishing period provided data sufficiently precise for estimation of age and sex composition. Cannery catch samplers attempted to spread their samples as much as possible among delivering scows.

Escapement enumeration of sockeye salmon was conducted on eleven river systems in Bristol Bay in 1974. These were: Kvichak, Branch, Naknek, Egegik, Ugashik, Wood, Igushik, Nuyakuk, Nushagak-Mulchatna, Snake and Togiak. Escapement counts are made from towers located on the banks of each of the rivers except at Snake River where a weir has been constructed just below the lake outlet. Tower counts are conducted for ten minutes on each bank, each hour.

The counts are expanded to estimate hourly escapements and the expanded counts are summed to determine the daily escapement total.

Extreme turbidity in the Nushagak River hindered the tower crew in their attempts to estimate the escapement. Post-season aerial estimates of the escapement into the Nushagak and Mulchatna systems were utilized instead of the tower counts. The AWL samples collected by the Nushagak tower crew were utilized to estimate the sex and age composition of the run past this tower.

Age designation in this report follows the Gilbert-Rich notation.

BRISTOL BAY FISHERY - 1974

Prompted by the forecast of an unusually low sockeye salmon run to Bristol Bay in 1974, drastic curtailment of the commercial fishery was anticipated. With a mandate from the Board of Fish and Game to "maximize spawning escapements" in all systems, a virtual closure of the fishery was expected to remain in effect until escapement goals were assured. Faced with the prospects of reduced fishing time, registered fishing effort was down about 50% below previous years and processing capacity was drastically reduced in the major districts.

As a result of the low predictions, traditional offshore and inshore test fishing programs were not conducted this season. Although the absence of test fishing programs and customary early season fishing periods was considered risky, most fishery managers felt that early fishing would place unacceptable pressure on sockeye stocks that were not expected to equal escapement requirements.

During the first week of July, it became apparent that returns would be stronger than forecast in several districts and fishing would probably be possible. On July 3, an emergency regulation was adopted which permitted the repeal of the "sliding gear schedule" (which limited fishermen to 25 fathoms of drift gear or 12-1/2 fathoms of set net gear) and waived the requirement of a 48-hour waiting period for fishermen transferring between districts. This emergency regulation was scheduled to go into effect when and if fishing time was announced for any of the major districts.

Since fishing time was ultimately allowed, there was a sudden influx of fishermen from outside the bay in a frantic effort to get their boats into the water. Due to these unusual situations, late licensing of vessels and gear was permitted without penalty to the fishermen.

The season catch of 275,000 mature Bristol Bay sockeye salmon harvested

by the Japanese mothership fleet was well below that of previous years. The combined harvest of 532,000 immature and mature fish harvested by the Japanese was the lowest since 1964.

The South Unimak/Shumagin Island fishery which also intercepts sockeye salmon bound for Bristol Bay was managed under a quota system this season to keep catches at a minimum. Fishermen at South Unimak caught 65,000 sockeye (50,000 quota), while the Shumagin Island fleet harvested 40,000 (25,000 quota).

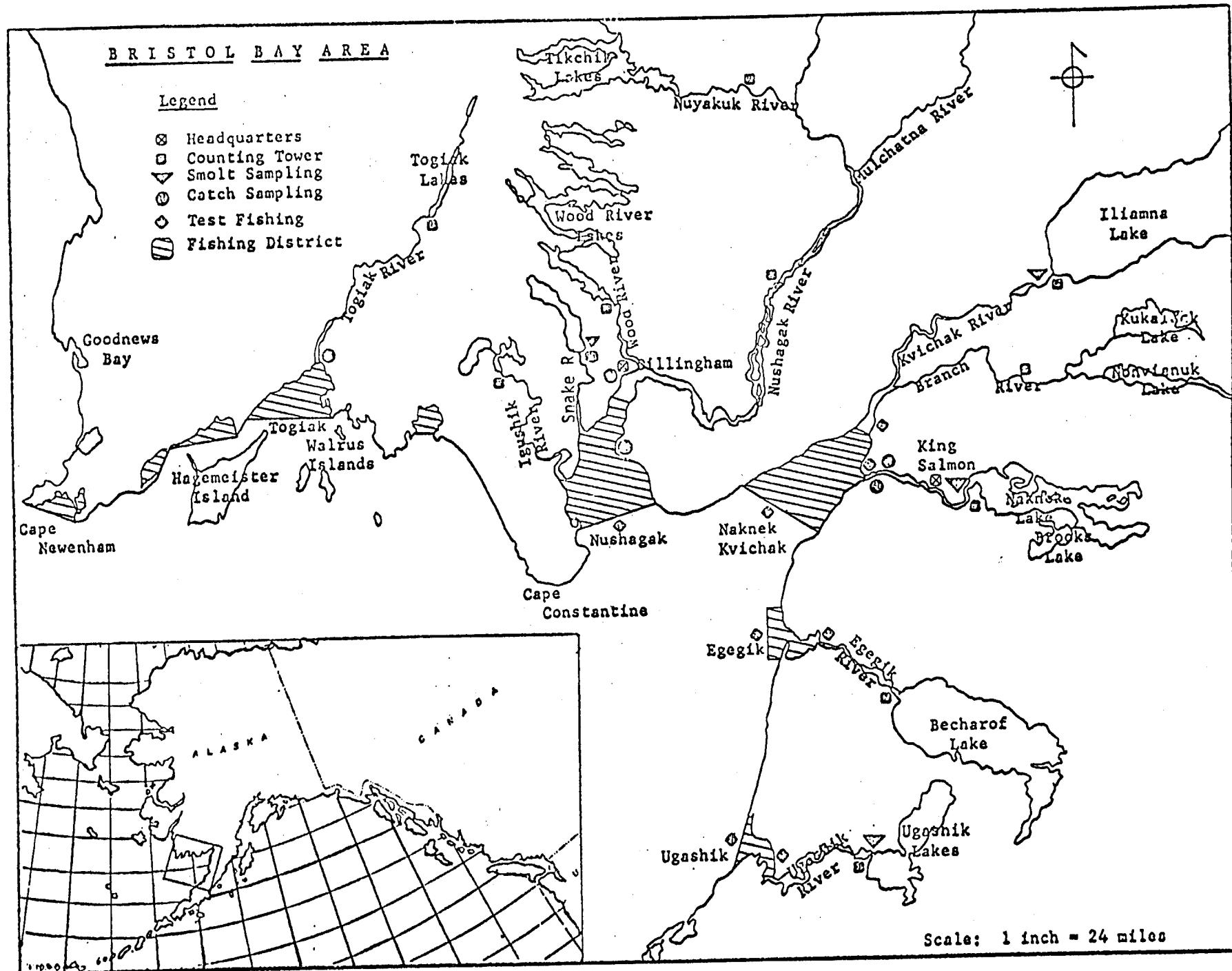


Figure 1. Approximate locations of catch sampling and counting towers, Bristol Bay, 1974.

TABLE 1 BRISTOL BAY SOCKEYE SALMON INSHORE RETURN, BY RIVER, 1974

SYSTEM	CATCH	ESCAPEMENT	TOTAL RETURN
KVICHAK RIVER	148,595	4,433,844	4,582,439
BRANCH RIVER	10,072	214,848	224,920
NAKNEK RIVER	379,496	1,241,058	1,620,554
SUB-TOTAL NAKNEK-KVICHAK DISTRICT	538,163	5,889,750	6,427,913
EGEGIK RIVER	172,253	1,275,630	1,447,883
UGASHIK RIVER	2,151	61,854	64,005
WOOD RIVER	422,693	1,708,836	2,131,529
IGUSHIK RIVER	61,843	358,752	420,595
NUYAKUK RIVER	17,169	154,614	171,783
NUSHAGAK-MULCHATNA RIVER	5,573	30,000	35,573
SNAKE RIVER	3,293	15,266	18,559
SUB-TOTAL NUSHAGAK-IGUSHIK DISTRICT	510,571	2,267,468	2,778,039
TOGIAK RIVER	139,341	82,992	222,333
TOTAL BAY	1,362,479	9,577,694	10,940,173

TABLE 2 BRISTOL BAY SOCKEYE SALMON RETURN, AGE GROUP BY RIVER SYSTEM, NUMBER, 1974

RIVER	AGE GROUP													TOTAL
	31	32	41	42	43	51	52	53	62	63	64	73	74	
KVICHAK	--	--	--	42,229	39,674	--	277,933	4,104,019	4,360	113,982	242	--	--	4,582,439
BRANCH	--	1,672	--	71,280	--	--	47,094	102,257	--	2,615	2	--	--	224,920
NAKNEK	--	1,064	--	150,166	18,609	--	266,122	948,693	145	232,901	1,922	932	--	1,620,554
SUB-TOTAL NAKNEK-KVICHAK	--	2,736	--	263,675	58,283	--	591,149	5,154,969	4,505	349,498	2,166	932	--	6,427,913
EGERGIK	--	--	--	57,475	--	--	96,325	1,065,927	--	223,209	2,473	539	1,935	1,447,883
UGASHIK	--	--	--	4,116	797	--	4,250	51,789	--	2,921	--	132	--	64,005
WOOD	1,707	--	--	1,505,844	--	--	394,918	208,499	3,689	16,872	--	--	--	2,131,529
IGUSHIK	--	--	501	23,978	--	--	106,311	279,708	2,006	8,091	--	--	--	420,595
NUYAKUK	524	--	1,153	85,534	--	524	65,882	12,182	1,121	4,863	--	--	--	171,783
NUSHAGAK-MULCHATNA	1,624	--	7,468	9,481	498	4,485	1,957	2,370	4,540	3,150	--	--	--	35,573
SNAKE	--	--	--	9,527	--	--	5,796	2,605	37	520	--	74	--	18,559
SUB-TOTAL NUSHAGAK-IGUSHIK	3,855	--	9,122	1,634,364	498	5,009	574,864	505,364	11,393	33,496	--	74	--	2,778,039
TOGIAK	226	--	1,143	53,870	--	--	125,195	27,218	2,866	11,730	--	65	--	222,333
TOTAL BAY	4,081	2,736	10,265	2,013,500	59,578	5,009	1,391,783	6,805,267	18,784	620,854	4,639	1,742	1,935	10,940,173

TABLE 3 BRISTOL BAY SOCKEYE SALMON RETURN, AGE GROUP BY RIVER SYSTEM, PERCENT, 1974

RIVER	AGE GROUP													TOTAL
	31	32	41	42	43	51	52	53	62	63	64	73	74	
KVICHAK	.00	.00	.00	.92	.87	.00	6.06	89.56	.09	2.49	.01	.00	.00	41.89
BANCH	.00	.74	.00	31.69	.00	.00	20.94	45.47	.00	1.16	.00	.00	.00	2.06
NAKNEK	.00	.06	.00	9.27	1.15	.00	16.42	58.54	.01	14.37	.12	.06	.00	14.81
SUB-TOTAL NAKNEK-KVICHAK	.00	.04	.00	4.10	.91	.00	9.20	80.20	.07	5.44	.03	.01	.00	58.76
ESEGEGIK	.00	.00	.00	3.97	.00	.00	6.65	73.62	.00	15.42	.17	.04	.13	13.23
UGASHIK	.00	.00	.00	6.43	1.25	.00	6.64	80.91	.00	4.56	.00	.21	.00	.59
WOOD	.08	.00	.00	70.65	.00	.00	18.53	9.78	.17	.79	.00	.00	.00	19.48
IGUSHIK	.00	.00	.12	5.70	.00	.00	25.28	66.50	.48	1.92	.00	.00	.00	3.84
NUYAKUK	.31	.00	.67	49.79	.00	.31	38.35	7.09	.65	2.83	.00	.00	.00	1.57
NUSHAGAK-MULCHATNA	4.57	.00	20.99	26.65	1.40	12.61	5.50	6.66	12.76	8.86	.00	.00	.00	.33
SNAKE	.00	.00	.00	51.33	.00	.00	31.23	14.04	.20	2.80	.00	.40	.00	.17
SUB-TOTAL NUSHAGAK-IGUSHIK	.14	.00	.33	58.83	.02	.18	20.69	18.19	.41	1.21	.00	.00	.00	25.39
TOGIAK	.10	.00	.51	24.23	.00	.00	56.31	12.24	1.30	5.28	.00	.03	.00	2.03
TOTAL BAY	.04	.03	.09	18.40	.54	.05	12.72	62.20	.17	5.68	.04	.02	.02	100.00

TABLE 4 BRISTOL BAY SOCKEYE SALMON RETURN, OCEAN AGE GROUP BY RIVER,
NUMBER AND PERCENT, 1974

SYSTEM	OCEAN AGE GROUP				TOTAL
	1	2	3	4	
KVICHAK					
NUMBER	39,674	4,146,490	391,915	4,360	4,582,439
PERCENT	.87	90.49	8.55	.09	41.89
BRANCH					
NUMBER	1,672	173,539	49,709	--	224,920
PERCENT	.74	77.16	22.10	.00	2.06
NAKNEK					
NUMBER	19,673	1,100,781	499,023	1,077	1,620,554
PERCENT	1.21	67.93	30.79	.07	14.81
SUB-TOTAL NAKNEK-KVICHAK					
NUMBER	61,019	5,420,810	940,647	5,437	6,427,913
PERCENT	.95	84.33	14.63	.09	58.76
EGERGIK					
NUMBER	--	1,125,875	321,469	539	1,447,883
PERCENT	.00	77.76	22.20	.04	13.23
UGASHIK					
NUMBER	797	55,905	7,171	132	64,005
PERCENT	1.25	87.34	11.20	.21	.59
WOOD					
NUMBER	--	1,716,050	411,790	3,689	2,131,529
PERCENT	.00	80.51	19.32	.17	19.48
IGUSHIK					
NUMBER	--	303,686	114,903	2,006	420,595
PERCENT	.00	72.20	27.32	.48	3.84
NUYAKUK					
NUMBER	--	98,240	71,898	1,645	171,783
PERCENT	.00	57.19	41.85	.96	1.57
NUSHAGAK-MULCHATNA					
NUMBER	498	13,475	12,575	9,025	35,573
PERCENT	1.40	37.88	35.35	25.37	.33
SNAKE					
NUMBER	--	12,132	6,316	111	18,559
PERCENT	.00	65.37	34.03	.60	.17
SUB-TOTAL NUSHAGAK-IGUSHIK					
NUMBER	498	2,143,583	617,482	16,476	2,778,039
PERCENT	.02	77.16	22.23	.59	25.39
TOGIAK					
NUMBER	--	81,314	138,068	2,951	222,333
PERCENT	.00	36.57	62.10	1.33	2.03
TOTAL BAY					
NUMBER	62,314	8,827,487	2,024,837	25,535	10,940,173
PERCENT	.57	80.69	18.51	.23	100.00

Table 5. Bristol Bay emergency order fishing periods by district, 1974. 1/

<u>NAKNEK-KVICHAK DISTRICT</u>					<u>EGERGIK DISTRICT</u>				
<u>E.O.</u> <u>No.</u>	<u>Date and Time</u>			<u>Hours Open</u>	<u>E.O.</u> <u>No.</u>	<u>Date and Time</u>			<u>Hours Open</u>
	<u>Naknek Section Only</u>				6	July 5	Noon - July 6	Noon	24
6	July 5	Noon	- July 6	Noon	24	7	July 6	Noon - Until Further Notice (July 20 9 am)	333
7	July 6	Noon	- Until Further Notice (July 20 9 am)						
	<u>Kvichak Section Only</u>								
10	July 17	9 am	- July 22	9 am	120 ^{5/}				

<u>UGASHIK DISTRICT</u>					<u>NUSHAGAK DISTRICT</u>					
<u>E.O.</u> <u>No.</u>	<u>Date and Time</u>			<u>Hours Open</u>	<u>E.O.</u> <u>No.</u>	<u>Date and Time</u>			<u>Hours Open</u>	
3 ^{3/}	June 26	4 pm	- June 27	4 am	12 ⁰	2	June 17	9 am - June 18	9 am	24
10	July 17	9 am	- July 22	9 am	120 ^{5/}	6	July 5	Noon - Until Further Notice (July 20 9 am)	357	
						11	July 22	9 am - July 22	3 pm	6 ^{5/}
						11	July 23	3 am - July 25	9 am	54 ^{5/}
	<u>TOGIAK DISTRICT^{2/}</u>					13	July 25	9 am - July 29	9 am	96 ^{5/}

<u>Togiak River-Kulukak Sections</u>					<u>Nushagak Section Only</u>					
<u>E.O.</u> <u>No.</u>	<u>Date and Time</u>			<u>Hours Closed</u>	<u>E.O.</u> <u>No.</u>	<u>Date and Time</u>			<u>Hours Open</u>	
4	July 3	9 am	- July 8	9 am	120	5 ^{4/}	July 4	Noon - July 5	Noon	24
8	July 8	9 am	- July 9	9 am	24					
9	July 15	9 am	- July 17	9 am	48					
	<u>Togiak Section Only</u>									
10	July 17	9 am	- July 22	9 am	120					
11	July 22	9 am	- July 29	9 am	168					
12	July 22	6 pm	- July 27	9 pm	123 ^{6/}					

1/ Emergency order period: Naknek-Kvichak, Egegik and Ugashik districts - 9 am June 23 to 9 am July 17; Nushagak district - 9 am June 16 to 9 am July 17.

2/ Togiak River section open 9 am Monday to 9 am Friday while Osviak, Matogak, Cape Pierce and Kulukak sections are open 9 am Monday to 9 am Saturday.

3/ Fishing permitted with a net mesh size of not less than 6-3/4".

4/ Also permitted a waiver of 48 hr. waiting period in all districts of Bristol Bay for district vessel transfers, transfers between type of gear, and relocation of set net sites. Sliding gear scale no longer in effect in Nushagak district for the duration of the emergency order period.

5/ Closed to fishing.

6/ Open to fishing.

NAKNEK-KVICHAK DISTRICT

District fishing boundaries remained the same throughout the season. Pre-season gear registration totaled 528 units, consisting of 315 drifts nets and 213 set nets. Peak fishing effort occurred during the week July 7-13, and was 296 units.

With the exception of the week of fishing just prior to the start of the emergency order period (June 23), no fishing was permitted in this district before July 5. By July 1, the likelihood of an open fishing period had increased, since the escapement into the Naknek River had reached 447,000 (56% of the goal) by that date. The escapement rate fell off on July 3, from that of the previous three days and a planned opening had to be delayed at least one additional day. By the afternoon of July 4, the Naknek River escapement goal of 800,000 was achieved. Shortly thereafter, an announcement was made for a 24-hour fishing period in the Naknek section, scheduled to open at 12 noon, July 5. In addition, the sliding gear scale was repealed and drift fishermen were permitted a maximum of 150 fathoms per vessel while set netters were allowed 50 fathoms per site.

After scale analysis of catch samples determined that interception of Kvichak fish in the Naknek section was minimal, and, since the Naknek River escapement goal had been obtained, fishing in the Naknek section was extended until further notice.

The Kvichak section was not opened for fishing before July 22 and, although the season closure was extended 5 days beyond the usual end of the emergency order period (July 17), the final escapement of 4,433,844 was more than 1.5 million short of the escapement goal of 6.0 million.

The district's season catch of 538,163 sockeye salmon accounted for 43% of the total Bay sockeye catch of 1,362,479. This is considerably below the long term average for this district. Age composition of the sockeye catch was 6% 4-year fish, 80% 5-year fish, and 14% 6-year fish.

Escapement goals were obtained, and eventually exceeded, in two of the three systems contributing to production in this district. The Branch River escapement of 214,848 was 16% over its goal of 185,000 while the Naknek River escapement of 1,241,058 surpassed its goal of 800,000 by 55%.

Sockeye salmon harvested in the Naknek-Kvichak district are caught as mixed stocks. The fish in the catch are apportioned to the individual river systems based on the age and sex composition of the catch samples in comparison with the age and sex composition of the escapement samples in the three contributing river systems. The details of this method are described in McCurdy and Schroeder (1968).

The season catch of 508,534 pink salmon not only rivaled the sockeye catch, but was the largest catch ever recorded for this species in the Naknek-Kvichak district. Historical catches of this species in past years have seldom exceeded 50,000 fish. The harvest of 480 king salmon was only 6% of the 20-year average of 8,900 for the district. Commercial harvests of coho and chum salmon are usually insignificant in this district. The 1974 catch fell far short of the long term averages.

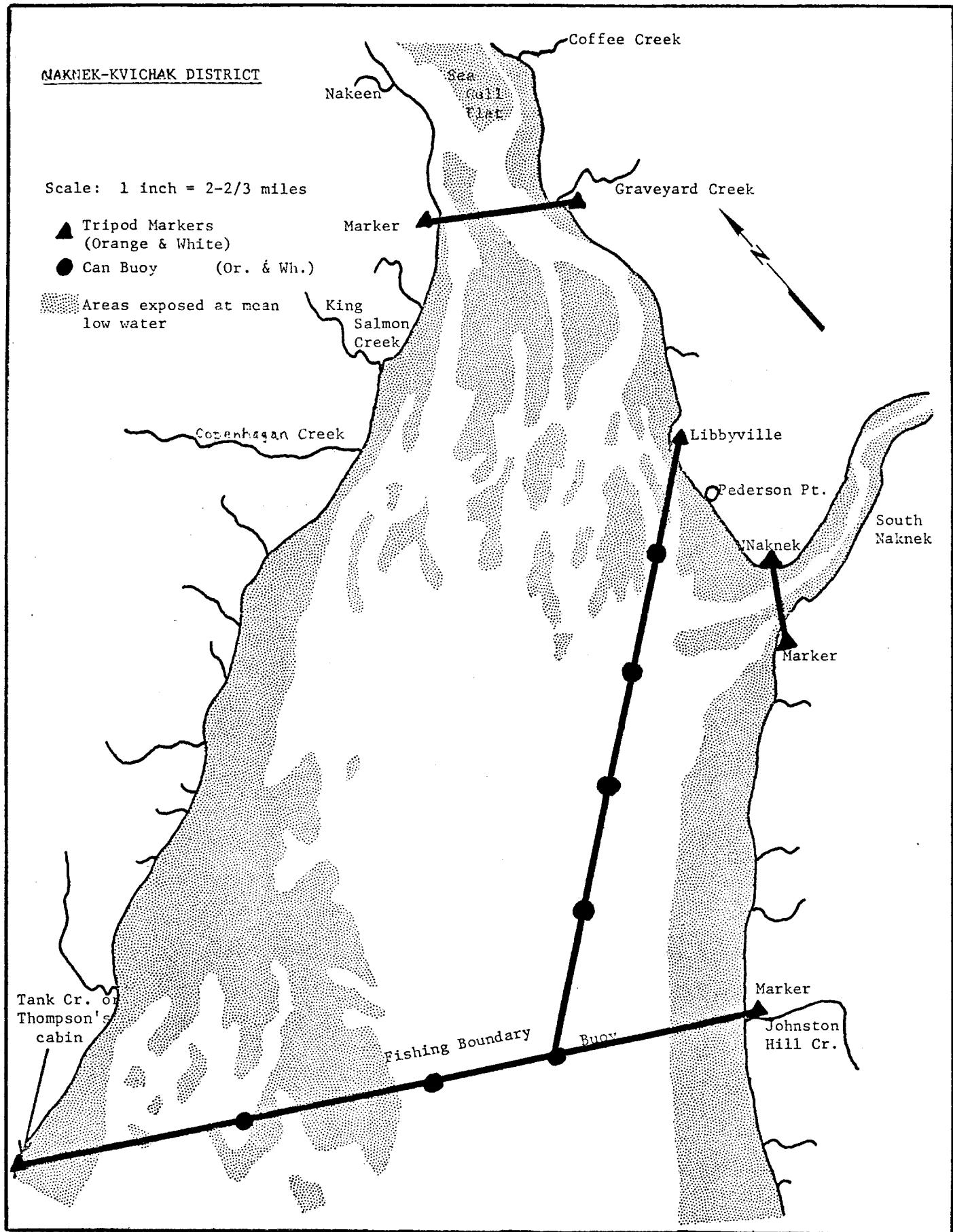


Figure 2. Naknek-Kvichak District commercial fishing boundaries, 1974.

TABLE 6 NAKNEK-KVICHAK DISTRICT INSHORE RUN OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND TOTAL PERCENT, 1974

	32	42	43	52	53	AGE GROUP 62	63	64	73	TOTAL
MALES										
ESCAPEMENT	2,736	146,855	34,418	330,545	3,201,815	4,360	142,975	1,210	--	3,864,914
CATCH	--	18,162	--	41,103	182,574	--	21,985	--	--	263,824
TOTAL	2,736	165,017	34,418	371,648	3,384,389	4,360	164,960	1,210	--	4,128,738
PERCENT	.07	4.00	.83	9.00	81.97	.11	3.99	.03	.00	100.00
FEMALES										
ESCAPEMENT	--	85,276	22,909	187,001	1,593,741	145	134,832	--	932	2,024,836
CATCH	--	13,382	956	32,500	176,839	--	49,706	956	--	274,339
TOTAL	--	98,658	23,865	219,501	1,770,560	145	184,538	956	932	2,299,175
PERCENT	.00	4.29	1.04	9.55	77.01	.01	8.02	.04	.04	100.00
SEXES COMBINED										
ESCAPEMENT	2,736	232,131	57,327	517,546	4,795,556	4,505	277,807	1,210	932	5,889,750
CATCH	--	31,544	956	73,603	359,413	--	71,691	956	--	538,163
TOTAL	2,736	263,675	58,283	591,149	5,154,969	4,505	349,498	2,166	932	6,427,913
PERCENT	.04	4.10	.91	9.20	80.20	.07	5.44	.03	.01	100.00

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TABLE 7 KVICHAK RIVER APPORTIONED CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

	42	43	52	53	62	63	64	TOTAL
	AGE GROUP							
CATCH								
MALES								
NUMBER	153	--	6,199	70,356	--	2,256	--	78,964
PERCENT	.19	.00	7.85	89.10	.00	2.86	.00	53.14
FEMALES								
NUMBER	1,108	692	2,692	63,515	--	1,382	242	69,631
PERCENT	1.59	.99	3.87	91.22	.00	1.98	.35	46.86
SEXES COMBINED								
NUMBER	1,261	692	8,891	133,871	--	3,638	242	148,595
PERCENT	.85	.47	5.98	90.09	.00	2.45	.16	100.00
ESCAPEMENT								
MALES								
NUMBER	12,951	17,441	197,551	2,698,059	4,360	75,851	--	3,006,213
PERCENT	.43	.58	6.57	89.75	.15	2.52	.00	67.80
FEMALES								
NUMBER	28,017	21,541	71,491	1,272,099	--	34,493	--	1,427,631
PERCENT	1.96	1.51	5.01	89.10	.00	2.42	.00	32.20
SEXES COMBINED								
NUMBER	40,968	38,982	269,042	3,970,148	4,360	110,344	--	4,433,844
PERCENT	.92	.88	6.07	89.54	.10	2.49	.00	100.00
CATCH AND ESCAPEMENT								
MALES								
NUMBER	13,104	17,441	203,750	2,768,415	4,360	78,107	--	3,085,177
PERCENT	.43	.57	6.60	89.73	.14	2.53	.00	67.33
FEMALES								
NUMBER	29,125	22,233	74,183	1,335,604	--	35,875	242	1,497,262
PERCENT	1.95	1.48	4.95	89.20	.00	2.40	.02	32.67
SEXES COMBINED								
NUMBER	42,229	39,674	277,933	4,104,019	4,360	113,982	242	4,582,439
PERCENT	.92	.87	6.06	89.56	.09	2.49	.01	100.00

TABLE 8 BRANCH RIVER APPORTIONED CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

				AGE GROUP			TOTAL
	32	42	52	53	63	64	
CATCH							
MALES							
NUMBER	--	1,599	2,741	4,987	107	--	9,434
PERCENT	.00	16.95	29.06	52.86	1.13	.00	93.67
FEMALES							
NUMBER	--	294	46	296	--	2	638
PERCENT	.00	46.08	7.21	46.40	.00	.31	6.33
SEXES COMBINED							
NUMBER	--	1,893	2,787	5,283	107	2	10,072
PERCENT	.00	18.80	27.67	52.45	1.06	.02	100.00
16							
ESCAPEMENT							
MALES							
NUMBER	1,672	58,519	41,799	88,614	2,508	--	193,112
PERCENT	.87	30.30	21.64	45.89	1.30	.00	89.88
FEMALES							
NUMBER	--	10,868	2,508	8,360	--	--	21,736
PERCENT	.00	50.00	11.54	38.46	.00	.00	10.12
SEXES COMBINED							
NUMBER	1,672	69,387	44,307	96,974	2,508	--	214,848
PERCENT	.78	32.29	20.62	45.14	1.17	.00	100.00
CATCH AND ESCAPEMENT							
MALES							
NUMBER	1,672	60,118	44,540	93,621	2,615	--	202,545
PERCENT	.83	29.68	21.99	46.21	1.29	.00	90.05
FEMALES							
NUMBER	--	11,162	2,554	8,656	--	2	22,374
PERCENT	.00	49.89	11.41	38.69	.00	.01	9.95
SEXES COMBINED							
NUMBER	1,672	71,280	47,094	102,257	2,615	2	224,920
PERCENT	.74	31.69	20.94	45.47	1.16	.00	100.00

TABLE 9 NAKNEK RIVER APPORTIONED CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

	32	42	43	52	AGE GROUP 53	62	63	64	73	TOTAL
CATCH										
MALES										
NUMBER	--	16,410	--	32,163	107,231	--	19,622	--	--	175,426
PERCENT	.00	9.35	.00	18.33	51.13	.00	11.19	.00	.00	46.23
FEMALES										
NUMBER	--	11,980	264	29,762	113,028	--	48,324	712	--	204,070
PERCENT	.00	5.87	.13	14.58	55.39	.00	23.68	.35	.00	53.77
SEXES COMBINED										
NUMBER	--	28,390	264	61,925	220,259	--	67,946	712	--	379,496
PERCENT	.00	7.48	.07	16.32	59.04	.00	17.90	.19	.00	100.00
 ESCAPEMENT										
MALES										
NUMBER	1,064	75,385	16,977	91,195	415,142	--	64,616	1,210	--	665,589
PERCENT	.16	11.33	2.55	13.70	62.37	.00	9.71	.18	.00	53.63
FEMALES										
NUMBER	--	46,391	1,368	113,002	313,292	145	100,339	--	932	575,469
PERCENT	.00	8.06	.24	19.64	54.44	.02	17.44	.00	.16	46.37
SEXES COMBINED										
NUMBER	1,064	121,776	18,345	204,197	728,434	145	164,955	1,210	932	1,241,058
PERCENT	.09	9.81	1.48	16.45	58.69	.01	13.29	.10	.08	100.00
 CATCH AND ESCAPEMENT										
MALES										
NUMBER	1,064	91,795	16,977	123,358	522,373	--	84,238	1,210	--	841,015
PERCENT	.13	10.91	2.02	14.67	62.11	.00	10.02	.14	.00	51.90
FEMALES										
NUMBER	--	58,371	1,632	142,764	426,320	145	148,663	712	932	779,539
PERCENT	.00	7.49	.21	18.31	54.69	.02	19.07	.09	.12	48.10
SEXES COMBINED										
NUMBER	1,064	150,166	18,609	266,122	948,693	145	232,901	1,922	932	1,620,554
PERCENT	.06	9.27	1.15	16.42	58.54	.01	14.37	.12	.06	100.00

TABLE 10 NAKNEK SUB-DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		CATCH	NUMBER IN CATCH	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/08-12/31	563	276	287	49.02	50.98	538,163	263,824	274,339

TABLE 11 NAKNEK SUB-DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP						TOTAL
			42	43	52	53	63	64	
MALES									
1	06/08- 12/31	COUNT PERCENT	18,162 6.88	-- .00	41,103 15.58	182,574 69.20	21,985 8.33	-- .00	263,824 100.00
FEMALES									
1	06/08- 12/31	COUNT PERCENT	13,382 4.88	.956 .35	32,500 11.85	176,839 64.46	49,706 18.12	.956 .35	274,339 100.00
SEXES COMBINED									
1	06/08- 12/31	COUNT PERCENT	31,544 5.86	.956 .18	73,603 13.68	359,413 66.78	71,691 13.32	.956 .18	538,163 100.00

TABLE 12 KVICHAK RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 23	1,008	1,008	.02	.02
24	1,164	2,172	.03	.05
25	1,734	3,906	.04	.09
26	5,694	9,600	.13	.22
27	5,160	14,760	.12	.34
28	17,178	31,938	.39	.73
29	47,028	78,966	1.06	1.79
30	208,056	287,022	4.69	6.48
JULY 1	258,618	545,640	5.83	12.31
2	288,462	834,102	6.51	18.82
3	320,760	1,154,862	7.23	26.05
4	311,268	1,466,130	7.02	33.07
5	366,936	1,833,066	8.28	41.35
6	362,790	2,195,856	8.18	49.53
7	330,510	2,526,366	7.45	56.98
8	387,078	2,913,444	8.73	65.71
9	327,510	3,240,954	7.39	73.10
10	398,334	3,639,288	8.98	82.08
11	296,058	3,935,346	6.68	88.76
12	208,356	4,143,702	4.70	93.46
13	106,200	4,249,902	2.39	95.85
14	83,928	4,333,830	1.89	97.74
15	39,798	4,373,628	.90	98.64
16	16,650	4,390,278	.38	99.02
17	11,112	4,401,390	.25	99.27
18	11,364	4,412,754	.26	99.53
19	5,142	4,417,896	.12	99.65
20	3,312	4,421,208	.07	99.72
21	3,516	4,424,724	.08	99.80
22	3,600	4,428,324	.08	99.88
23	1,428	4,429,752	.03	99.91
24	1,764	4,431,516	.04	99.95
25	900	4,432,416	.02	99.97
26	516	4,432,932	.01	99.98
27	600	4,433,532	.01	99.99
28	312	4,433,844	.01	100.00

TABLE 13 KVICHAK RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/23-07/03	546	339	207	62.09	37.91	1,154,862	717,030	437,832
2	07/04-07/28	752	525	227	69.81	30.19	3,278,932	2,289,183	989,799
TOTAL		1,298	864	434	67.80	32.20	4,433,844	3,006,213	1,427,631

TABLE 14 KVICHAK RIVER ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP						TOTAL
			42	43	52	53	62	63	
MALES									
1	06/23-	COUNT	4,230	--	27,497	670,497	--	14,806	717,030
	07/03	PERCENT	.59	.00	3.83	93.51	.00	2.06	23.85
2	07/04-	COUNT	8,721	17,441	170,054	2,027,562	4,360	61,045	2,289,183
	07/28	PERCENT	.38	.76	7.43	88.57	.19	2.67	76.15
COLUMN TOTALS		COUNT	12,951	17,441	197,551	2,698,059	4,360	75,851	3,006,213
		PERCENT	.43	.58	6.57	89.75	.15	2.52	100.00
FEMALES									
1	06/23-	COUNT	10,576	8,460	14,806	391,299	--	12,691	437,632
	07/03	PERCENT	2.42	1.93	3.38	89.37	.00	2.90	30.67
2	07/04-	COUNT	17,441	13,081	56,685	880,790	--	21,802	989,799
	07/28	PERCENT	1.76	1.32	5.73	88.99	.00	2.20	69.33
COLUMN TOTALS		COUNT	28,017	21,541	71,491	1,272,089	--	34,493	1,427,631
		PERCENT	1.96	1.51	5.01	89.10	.00	2.42	100.00
SEXES COMBINED									
1	06/23-	COUNT	14,806	8,460	42,303	1,061,796	--	27,497	1,154,862
	07/03	PERCENT	1.28	.73	3.67	91.94	.00	2.38	26.05
2	07/04-	COUNT	26,162	30,522	226,739	2,908,352	4,360	82,947	3,278,982
	07/28	PERCENT	.80	.93	6.91	88.70	.13	2.53	73.95
COLUMN TOTALS		COUNT	40,968	38,982	269,042	3,970,148	4,360	110,344	4,433,844
		PERCENT	.92	.88	6.07	89.54	.10	2.49	100.00

TABLE 15 BRANCH RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 27	6	6	.00	.00
28	132	138	.06	.06
29	2,514	2,652	1.17	1.23
30	11,502	14,154	5.35	6.58
JULY 1	24,474	38,628	11.39	17.97
2	30,336	68,964	14.12	32.09
3	27,672	96,636	12.88	44.97
4	28,080	124,716	13.07	58.04
5	21,852	146,568	10.17	68.21
6	23,112	169,680	10.76	78.97
7	19,800	189,480	9.22	88.19
8	9,996	199,476	4.65	92.84
9	4,584	204,060	2.13	94.97
10	4,998	209,058	2.33	97.30
11	3,186	212,244	1.48	98.78
12	870	213,114	.41	99.19
13	852	213,966	.40	99.59
14	792	214,758	.37	99.96
15	90	214,848	.04	100.00

TABLE 16 BRANCH RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/27-07/15	257	231	26	89.88	10.12	214,848	193,112	21,736

TABLE 17 NAKNEK RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 23	786	786	.06	.06
24	996	1,782	.08	.14
25	22,644	24,426	1.82	1.96
26	10,350	34,776	.83	2.79
27	19,176	53,952	1.55	4.34
28	44,658	98,610	3.60	7.94
29	75,942	174,552	6.12	14.06
30	143,550	318,102	11.57	25.63
JULY 1	128,664	446,766	10.37	36.00
2	144,912	591,678	11.68	47.68
3	117,972	709,650	9.51	57.19
4	189,186	898,836	15.24	72.43
5	175,410	1,074,246	14.13	86.56
6	62,796	1,137,042	5.06	91.62
7	21,426	1,158,468	1.73	93.35
8	26,484	1,184,952	2.13	95.48
9	27,426	1,212,378	2.21	97.69
10	7,728	1,220,106	.62	98.31
11	4,314	1,224,420	.35	98.66
12	3,534	1,227,954	.29	98.95
13	3,360	1,231,314	.27	99.22
14	2,232	1,233,546	.18	99.40
15	1,842	1,235,388	.15	99.55
16	1,452	1,236,840	.12	99.67
17	1,020	1,237,860	.08	99.75
18	1,404	1,239,264	.11	99.86
19	900	1,240,164	.07	99.93
20	324	1,240,488	.03	99.96
21	402	1,240,890	.03	99.99
22	168	1,241,058	.01	100.00

TABLE 18 NAKNEK RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/23-06/27	371	202	169	54.45	45.55	53,952	29,375	24,577
2	06/28-07/02	577	316	261	54.77	45.23	537,726	294,491	243,235
3	07/03-07/22	610	321	289	52.62	47.38	649,380	341,723	307,657
TOTAL		1,558	939	719	53.63	46.37	1,241,058	665,589	575,469

TABLE 19 NAKNEK RIVER ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD MALES	DATE		AGE GROUP								TOTAL	
			32	42	43	52	53	62	63	64		
1	06/23-	COUNT	--	2,181	873	1,890	21,959	--	2,327	145	--	29,375
	06/27	PERCENT	.00	7.43	2.97	6.44	74.75	.00	7.92	.50	.00	4.41
2	06/28-	COUNT	--	31,686	6,523	30,754	199,434	--	26,094	--	--	294,491
	07/02	PERCENT	.00	10.76	2.22	10.44	67.72	.00	8.86	.00	.00	44.25
3	07/03-	COUNT	1,064	41,518	9,581	58,551	193,749	--	36,195	1,065	--	341,723
	07/22	PERCENT	.31	12.15	2.80	17.13	56.70	.00	10.59	.31	.00	51.34
COLUMN TOTALS		COUNT	1,064	75,385	16,977	91,195	415,142	--	64,616	1,210	--	665,589
		PERCENT	.16	11.33	2.55	13.70	62.37	.00	9.71	.18	.00	100.00
FEMALES												
1	06/23-	COUNT	--	873	436	3,199	17,015	145	2,909	--	--	24,577
	06/27	PERCENT	.00	3.55	1.78	13.02	69.23	.59	11.83	.00	.00	4.27
2	06/28-	COUNT	--	16,775	932	43,801	132,335	--	48,460	--	932	243,235
	07/02	PERCENT	.00	6.90	.38	18.01	54.41	.00	19.92	.00	.38	42.27
3	07/03-	COUNT	--	28,743	--	66,002	163,942	--	48,970	--	--	307,657
	07/22	PERCENT	.00	9.34	.00	21.45	53.29	.00	15.92	.00	.00	53.46
COLUMN TOTALS		COUNT	--	46,391	1,368	113,002	313,292	145	100,339	--	932	575,469
		PERCENT	.00	8.06	.24	19.64	54.44	.02	17.44	.00	.16	100.00
SEXES COMBINED												
1	06/23-	COUNT	--	3,054	1,309	5,089	38,974	145	5,236	145	--	53,952
	06/27	PERCENT	.00	5.66	2.43	9.43	72.24	.27	9.70	.27	.00	4.35
2	06/28-	COUNT	--	48,461	7,455	74,555	331,769	--	74,554	--	932	537,726
	07/02	PERCENT	.00	9.01	1.39	13.87	61.70	.00	13.86	.00	.17	43.33
3	07/03-	COUNT	1,064	70,261	9,581	124,553	357,691	--	85,165	1,065	--	649,380
	07/22	PERCENT	.16	10.82	1.48	19.18	55.08	.00	13.12	.16	.00	52.32
COLUMN TOTALS		COUNT	1,064	121,776	18,345	204,197	728,434	145	164,955	1,210	932	1,241,058
		PERCENT	.09	9.81	1.48	16.45	58.69	.01	13.29	.10	.08	100.00

127

EGEGIK DISTRICT

The pre-season forecast also contributed to a significant drop in the gear registration levels for this district. Licensing of gear included 86 drift units and 80 set nets for a total of 166 units of gear. A peak effort of 99 units (60% of that registered) was observed during the week of July 7-13, and included some influx of effort from other districts. Fishing district boundaries remained unchanged throughout the season in this district.

Aerial surveillance of Egegik River lagoon began early in the season and revealed a gradual buildup of fish into the river beyond the reach of the commercial fishery. Escapement surveys flown on June 26 through July 1, showed a steady increase from 17,000 to 126,000 fish. Through July 1, the aerial estimate of fish in the lagoon plus those past the counting tower totaled about 156,000, or 26% of the goal of 600,000. By July 3 this had reached 400,000, or 67% of the goal (250,000 past the counting tower and 150,000 in Egegik lagoon). The escapement estimate as of midday, July 4, was 500,000 fish. With the escapement goal assured, a 24-hour fishing period was announced for 12 noon, on July 5. As with the Naknek section opening, the emergency regulation that permitted the full compliment of gear and a waiver of the 48-hour re-registration waiting period went into effect with this July 5 opening in the Egegik district.

As the escapement goal was assured, the July 5-6 opening was extended until further notice. Fishing remained open continuously until the end of the emergency order period when the regular two-day weekend closure went into effect.

The district's cumulative sockeye catch of 172,253 sockeye salmon was 13% of the total bay catch of 1.36 million. This catch was only 16% of the 20-year district average of 1.1 million sockeyes. The sockeye salmon catch accounted for 94% of the district catch of all species. Age composition of the total

sockeye run was 4% 4-year fish, 80% 5-year fish, and 16% 6-year fish.

The final escapement of 1,275,630 sockeye salmon into Becharof Lake was more than double (213%) the goal of 600,000 fish.

The commercial harvests of the other species of salmon in the Egegik district were significantly lower than long term historical averages with the exception of pink salmon. Since pink catches here are usually very low, the 1974 pink salmon catch of 4,400 was a record for this district and exceeded the 20-year even-year average by more than 4,000.

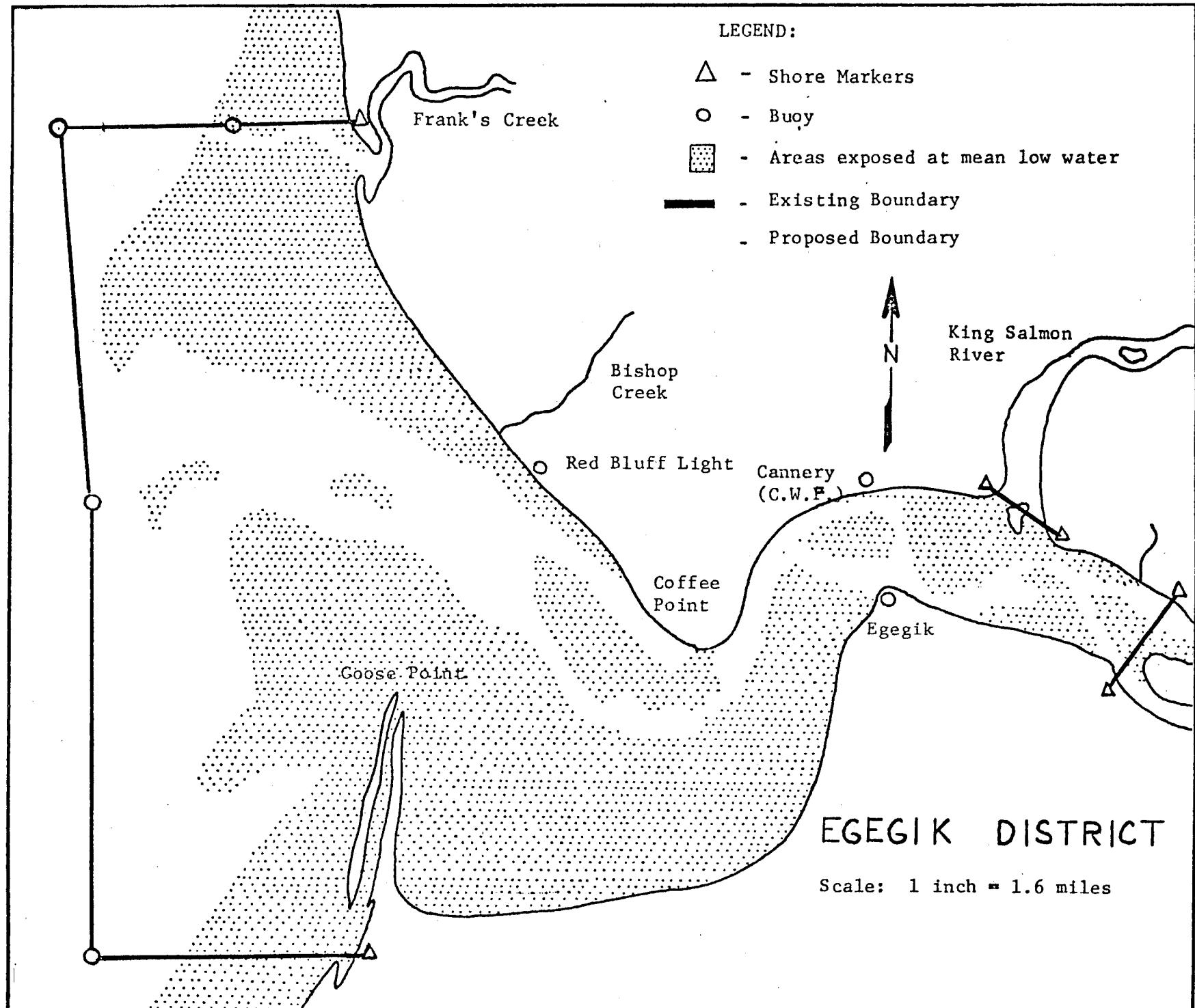


Figure 3. Egegik District commercial fishing boundaries, 1974.

TABLE 20 EGEGLIK RIVER CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

	42	52	53	AGE GROUP 63	64	73	74	TOTAL
CATCH								
MALES								
NUMBER	7,462	6,219	60,009	10,882	--	--	--	84,572
PERCENT	8.82	7.35	70.96	12.67	.00	.00	.00	49.10
FEMALES								
NUMBER	8,395	12,437	49,126	17,723	--	--	--	97,681
PERCENT	9.58	14.18	56.03	20.21	.00	.00	.00	50.90
SEXES COMBINED								
NUMBER	15,857	18,656	109,135	28,605	--	--	--	172,253
PERCENT	9.20	10.83	63.36	16.61	.00	.00	.00	100.00
 ESCAPEMENT								
MALES								
NUMBER	18,175	49,698	575,627	95,427	1,935	539	1,935	743,336
PERCENT	2.44	6.69	77.44	12.84	.26	.07	.26	58.27
FEMALES								
NUMBER	23,443	27,971	381,165	99,177	538	--	--	532,294
PERCENT	4.40	5.26	71.61	18.63	.10	.00	.00	41.73
SEXES COMBINED								
NUMBER	41,618	77,669	956,792	194,604	2,473	539	1,935	1,275,630
PERCENT	3.26	6.09	75.01	15.26	.19	.04	.15	100.00
 CATCH AND ESCAPEMENT								
MALES								
NUMBER	25,637	55,917	635,636	106,309	1,935	539	1,935	827,908
PERCENT	3.10	6.75	76.78	12.84	.23	.07	.23	57.18
FEMALES								
NUMBER	31,838	40,408	430,291	116,900	538	--	--	619,975
PERCENT	5.13	6.52	69.40	18.86	.09	.00	.00	42.82
SEXES COMBINED								
NUMBER	57,475	96,325	1,065,927	223,209	2,473	539	1,935	1,447,883
PERCENT	3.97	6.65	73.62	15.42	.17	.04	.13	100.00

TABLE 21 EGEGLIK DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		CATCH	NUMBER IN CATCH	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/08-12/31	554	272	282	49.10	50.90	172,253	84,572	87,681

TABLE 22 EGEGIK RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 26	78	78	.01	.01
	204	282	.02	.03
	1,350	1,632	.10	.13
	3,396	5,028	.27	.40
30	8,130	13,158	.64	1.04
JULY	17,040	30,198	1.33	2.37
	67,950	98,148	5.33	7.70
	151,800	249,948	11.90	19.60
	83,034	332,982	6.51	26.11
	112,956	445,938	8.85	34.96
	112,050	557,988	8.78	43.74
	154,716	712,704	12.13	55.87
	117,348	830,052	9.20	65.07
	49,632	879,684	3.89	68.96
	58,224	937,908	4.56	73.52
	93,894	1,031,802	7.36	80.88
	67,062	1,098,864	5.26	86.14
	82,530	1,181,394	6.47	92.61
	45,450	1,226,844	3.56	96.17
	18,978	1,245,822	1.49	97.66
	7,008	1,252,830	.55	98.21
	11,604	1,264,434	.91	99.12
	3,534	1,267,968	.28	99.40
	1,164	1,269,132	.09	99.49
	1,014	1,270,146	.08	99.57
	684	1,270,830	.05	99.62
	564	1,271,394	.04	99.66
	996	1,272,390	.08	99.74
	348	1,272,738	.03	99.77
	438	1,273,176	.03	99.80
	726	1,273,902	.06	99.86
	1,152	1,275,054	.09	99.95
	468	1,275,522	.04	99.99
	108	1,275,630	.01	100.00

TABLE 23 EGEGIK RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/26-07/03	464	277	187	59.70	40.30	249,948	149,215	100,733
2	07/04-07/29	530	307	223	57.92	42.08	1,025,682	594,121	431,561
TOTAL		994	584	410	58.27	41.73	1,275,630	743,336	532,294

TABLE 24 EGEGIK RIVER ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP							TOTAL
			42	52	53	63	64	73	74	
MALES										
1	06/26- 07/03	COUNT PERCENT	2,693 1.81	12,928 8.66	103,427 69.31	29,628 19.86	-- .00	539 .36	-- .00	149,215 20.07
2	07/04- 07/29	COUNT PERCENT	15,482 2.61	36,770 6.19	472,200 79.48	65,799 11.07	1,935 .33	-- .00	1,935 .33	594,121 79.93
COLUMN TOTALS		COUNT PERCENT	18,175 2.44	49,698 6.69	575,627 77.44	95,427 12.84	1,935 .26	539 .07	1,935 .26	743,336 100.00
FEMALES										
1	06/26- 07/03	COUNT PERCENT	2,155 2.14	8,619 8.56	65,719 65.24	23,702 23.53	538 .53	-- .00	-- .00	100,733 18.92
2	07/04- 07/29	COUNT PERCENT	21,288 4.93	19,352 4.48	315,446 73.09	75,475 17.49	-- .00	-- .00	-- .00	431,561 81.08
COLUMN TOTALS		COUNT PERCENT	23,443 4.40	27,971 5.26	381,165 71.61	99,177 18.63	538 .10	-- .00	-- .00	532,294 100.00
SEXES COMBINED										
1	06/26- 07/03	COUNT PERCENT	4,848 1.94	21,547 8.62	169,146 67.67	53,330 21.34	538 .21	539 .22	-- .00	249,948 19.59
2	07/04- 07/29	COUNT PERCENT	36,770 3.59	56,122 5.47	787,646 76.79	141,274 13.77	1,935 .19	-- .00	1,935 .19	1,025,682 80.41
COLUMN TOTALS		COUNT PERCENT	41,618 3.26	77,669 6.09	956,792 75.01	194,604 15.26	2,473 .19	539 .04	1,935 .15	1,275,630 100.00

135

UGASHIK DISTRICT

With a forecast inshore run of only 90,000 sockeye salmon to this district, fishing was expected to remain closed for the second consecutive year.

The pre-season registration for the Ugashik district (20 drift units and 22 set units) was made up of fishermen who either did not plan to fish (the case with the majority of the set netters) or who had transferred to another district in Bristol Bay after the early-season king salmon run was over. A 12-hour, king gear only opening was permitted on June 26-27 and produced an insignificant catch.

No fishing was permitted between June 27 and July 22. This complete closure included a five-day extension (July 17 to 22) beyond the normal end of the emergency order period because the run was extremely weak.

The total commercial catch of sockeye salmon was 2,151 with over 1,600 of that harvest occurring during the first week following the end of the emergency order period. The sockeye catch was only 21% of the entire district harvest of all species.

The final escapement of 61,854 sockeyes fell far short of the desired goal of 500,000 (only 12% of the goal).

Age composition of the Ugashik River sockeye run this year was 8% 4-year fish, 87% 5-year fish, and 5% 6-fish.

Record numbers of pink salmon were caught in this district also. The catch of over 300 pinks was more than four times larger than any single year in the past 20 years. The harvest of 4,055 coho salmon was more than double the 20-year average for this species. The catches of king and chum salmon, however, were considerably below historical averages.

UGASHIK DISTRICT

Scale: 1 inch = 1.6 miles

Key:

▲ Tripod Markers
(Orange & White)

■ Areas exposed at
mean low water

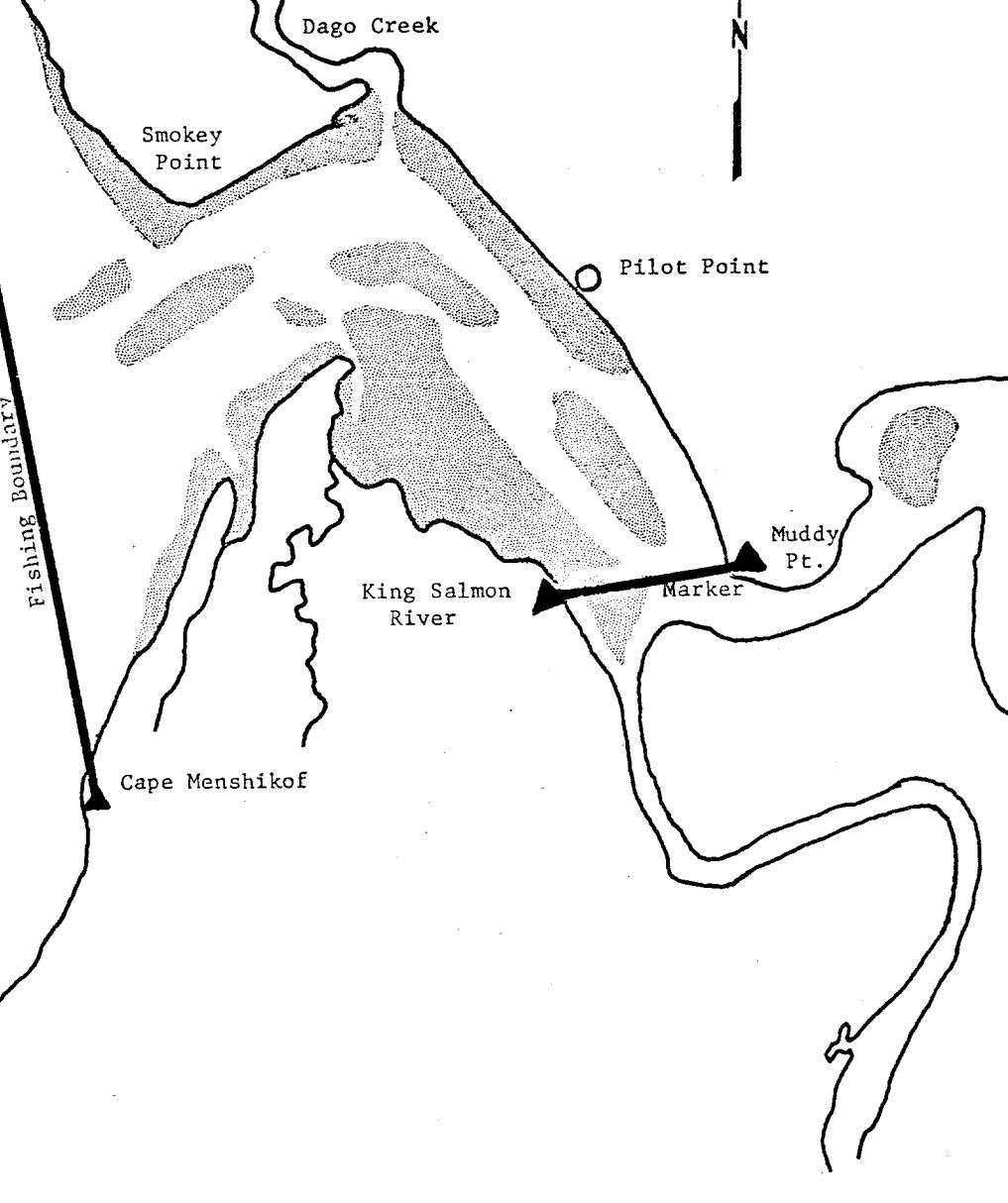


Figure 4. Ugashik District commercial fishing boundaries, 1974.

TABLE 25 UGASHIK RIVER CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

	AGE GROUP						
	42	43	52	53	63	73	TOTAL
CATCH							
MALES							
NUMBER	80	27	80	866	67	--	1,120
PERCENT	7.15	2.41	7.14	77.32	5.98	.00	52.07
FEMALES							
NUMBER	58	--	63	875	31	4	1,031
PERCENT	5.62	.00	6.11	84.87	3.01	.39	47.93
SEXES COMBINED							
NUMBER	138	27	143	1,741	98	4	2,151
PERCENT	6.41	1.25	6.65	80.94	4.56	.19	100.00
 ESCAPEMENT							
MALES							
NUMBER	2,310	770	2,310	24,895	1,925	--	32,210
PERCENT	7.17	2.39	7.17	77.29	5.98	.00	52.07
FEMALES							
NUMBER	1,668	--	1,797	25,153	898	128	29,644
PERCENT	5.63	.00	6.06	84.85	3.03	.43	47.93
SEXES COMBINED							
NUMBER	3,978	770	4,107	50,048	2,823	128	61,854
PERCENT	6.43	1.25	6.64	80.91	4.56	.21	100.00
 CATCH AND ESCAPEMENT							
MALES							
NUMBER	2,390	797	2,390	25,761	1,992	--	33,330
PERCENT	7.17	2.39	7.17	77.29	5.98	.00	52.07
FEMALES							
NUMBER	1,726	--	1,860	26,028	929	132	30,675
PERCENT	5.63	.00	6.06	84.85	3.03	.43	47.93
SEXES COMBINED							
NUMBER	4,116	797	4,250	51,789	2,921	132	64,005
PERCENT	6.43	1.25	6.64	80.91	4.56	.21	100.00

TABLE 26 UGASHIK RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JULY 5	66	66	.11	.11
6	552	618	.89	1.00
7	2,796	3,414	4.52	5.52
8	486	3,900	.79	6.31
9	78	3,978	.13	6.44
10	102	4,080	.16	6.60
11	96	4,176	.16	6.76
12	36	4,212	.06	6.82
13	9,186	13,398	14.85	21.67
14	33,456	46,854	54.09	75.76
15	9,564	56,418	15.46	91.22
16	1,368	57,786	2.21	93.43
17	360	58,146	.58	94.01
18	2,502	60,648	4.04	98.05
19	342	60,990	.55	98.60
20	942	61,932	1.52	100.12
21	-144	61,788	-.23	99.89
22	66	61,854	.11	100.00

TABLE 27 UGASHIK RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	07/05-07/22	482	251	231	52.07	47.93	61,854	32,210	29,644

NUSHAGAK DISTRICT

Pre-season registration for this district included 432 units of drift gear and 187 units of set gear for a total of 619 units. Peak fishing effort came during the week of July 8-14, when 321 units were actively fished (52% of the number registered).

An early-season period for king salmon on June 17-18, produced disappointing catches. Subsequent king escapement indices, through June 19, suggested that a weak run was to be expected for the third consecutive year.

Combined with the poor sockeye forecast, the early indication of a poor king run necessitated a general announcement on June 21 that additional fishing time in the Nushagak district was very unlikely during the remainder of the emergency order period.

Escapements into the various rivers were closely monitored and a dramatic increase into Wood River began on June 30 and continued until escapements reached 732,000 by mid-afternoon on July 3. Since the escapement goal of 800,000 was assured, a 24-hour fishing period was announced for July 4-5, for the Nushagak section. As was the case in the other major districts, the sliding gear schedule was repealed and a waiver of the 48-hour waiting period for district transfers went into effect.

There was no indication prior to July 4, that the sockeye run to Igushik River would be strong enough to permit an opening of the Igushik section. An aerial survey on that day revealed a significant escapement and on July 5, the entire Nushagak district was opened to fishing until further notice. Fishing remained open on a continuous basis until July 20, when a regular 48-hour weekend closure went into effect.

By July 20, the harvest of pink salmon had reached 324,000 and indicated that the run of this species was either very early or considerably stronger than what had been forecast. Although a 12-hour opening was permitted on July

23, the poor pink catch that resulted prompted a closure of the Nushagak district for the balance of the week through July 28. The season catch of 413,613 pinks was only half of the long term 20-year even-year average.

The catch of 510,571 sockeye salmon in the Nushagak district was 37% of the total Bristol Bay catch of that species. The harvest was considerably below the 20-year average of about 1 million fish. Age composition of the catch was 62% 4-year fish, 36% 5-year fish, and 1% 6-year fish.

The escapement of 1,708,836 sockeye into Wood River was more than double (214%) the escapement goal of 800,000. Aerial surveys, however, indicated good distribution of spawners in all areas of the system. The Igushik River also exceeded its escapement goal of 150,000 by a large margin (239%). The Nuyakuk River, Snake River, and the Nushagak-Mulchatna systems failed to achieve their respective goals.

The final king salmon harvest of 32,000 was the second smallest in 20 years and was only slightly over the record low catch of 1973. The catches of chum and coho salmon were also below long term historical levels.

The Nushagak district sockeye salmon catch was apportioned to the various rivers in a multi-step process. Based on the age and sex composition of the remaining catch sampling in comparison with the age and sex composition of the escapement sampling conducted on the various river systems.

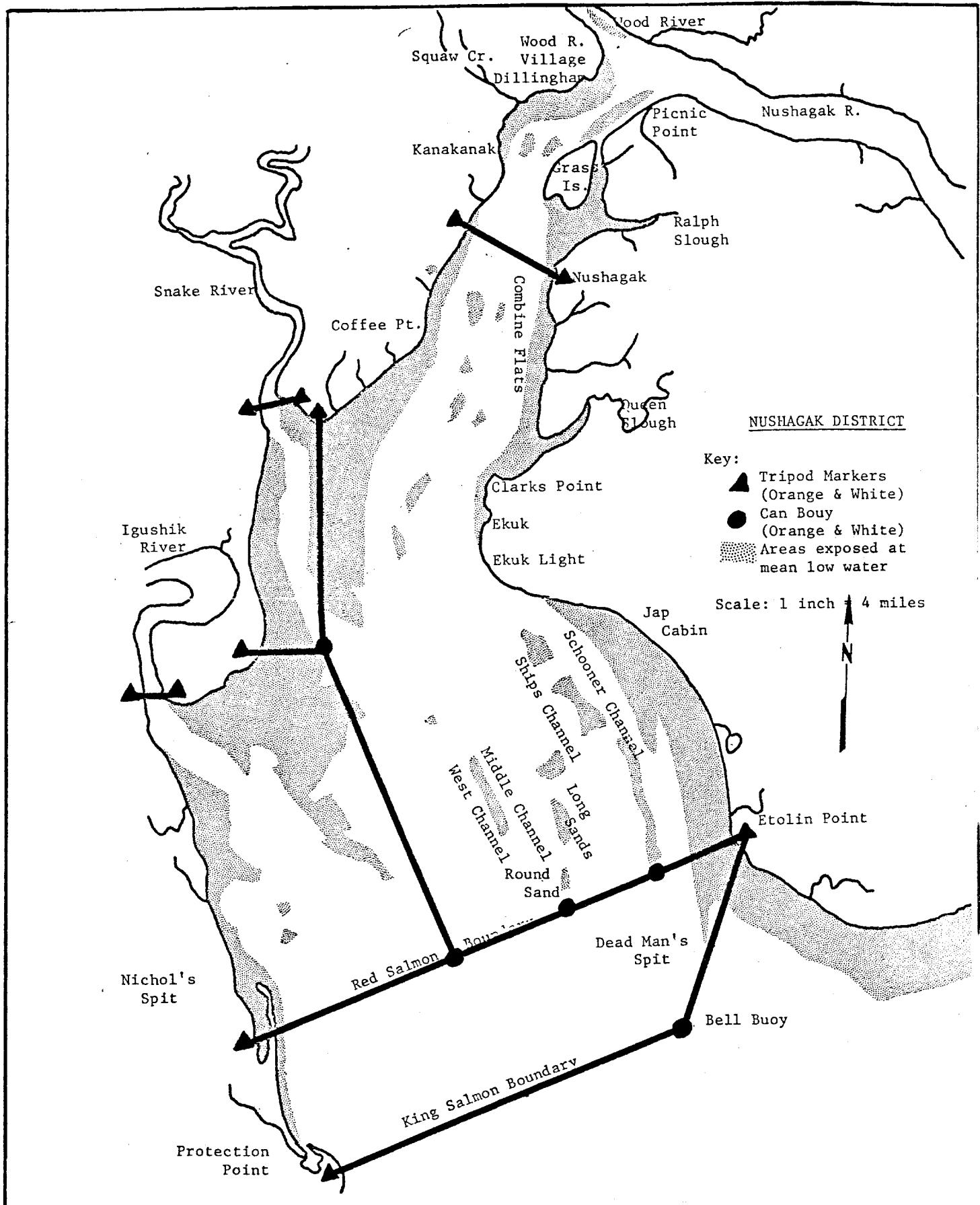


Figure 5. Nushagak-Igushik District commercial fishing boundaries, 1974.

TABLE 28 NUSHAGAK-IGUSHIK DISTRICT INSHORE RUN OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND TOTAL PERCENT, 1974

	31	41	42	43	51	52	AGE GROUP 53	62	63	73	TOTAL
MALES											
ESCAPEMENT	685	4,254	546,451	--	2,002	237,005	171,676	3,461	17,765	74	983,373
CATCH	1,463	731	153,236	--	--	45,409	46,710	731	2,784	--	251,064
TOTAL	2,148	4,985	699,687	--	2,002	282,414	218,386	4,192	20,549	74	1,234,437
PERCENT	.17	.40	56.68	.00	.16	22.88	17.69	.34	1.67	.01	100.00
FEMALES											
ESCAPEMENT	1,707	4,137	771,516	498	3,007	256,333	228,710	6,760	11,427	--	1,284,095
CATCH	--	--	163,161	--	--	36,117	58,268	441	1,520	--	259,507
TOTAL	1,707	4,137	934,677	498	3,007	292,450	286,978	7,201	12,947	--	1,543,602
PERCENT	.11	.27	60.55	.03	.19	18.95	18.59	.47	.84	.00	100.00
SEXES COMBINED											
ESCAPEMENT	2,392	8,391	1,317,967	498	5,009	493,338	400,386	10,221	29,192	74	2,267,468
CATCH	1,463	731	316,397	--	--	81,526	104,978	1,172	4,304	--	510,571
TOTAL	3,855	9,122	1,634,364	498	5,009	574,864	505,364	11,393	33,496	74	2,778,039
PERCENT	.14	.33	58.83	.02	.18	20.69	18.19	.41	1.21	.00	100.00

TABLE 29 IGUSHIK RIVER APPORTIONED CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

			AGE GROUP				TOTAL
	41	42	52	53	62	63	
CATCH							
MALES							
NUMBER	27	1,592	6,063	22,542	96	149	30,469
PERCENT	.09	5.22	19.90	73.98	.32	.49	49.27
FEMALES	--	1,796	3,314	25,680	14	570	31,374
NUMBER	.00	5.72	10.56	81.05	.05	1.82	50.73
SEXES COMBINED							
NUMBER	27	3,388	9,377	48,222	110	719	61,843
PERCENT	.04	5.48	15.16	77.98	.18	1.16	100.00
ESCAPEMENT							
MALES							
NUMBER	474	6,522	62,487	109,037	1,422	2,786	182,728
PERCENT	.26	3.57	34.20	59.67	.78	1.52	50.93
FEMALES	--	14,068	34,447	122,449	474	4,586	176,024
NUMBER	.00	7.99	19.57	69.56	.27	2.61	49.07
SEXES COMBINED							
NUMBER	474	20,590	96,934	231,486	1,896	7,372	358,752
PERCENT	.13	5.74	27.02	64.53	.53	2.05	100.00
CATCH AND ESCAPEMENT							
MALES							
NUMBER	501	8,114	68,550	131,579	1,518	2,935	213,197
PERCENT	.23	3.81	32.15	61.72	.71	1.38	50.69
FEMALES	--	15,864	37,761	148,129	488	5,156	207,398
NUMBER	.00	7.65	18.21	71.42	.23	2.49	49.31
SEXES COMBINED							
NUMBER	501	23,976	106,311	279,708	2,006	8,091	420,595
PERCENT	.12	5.70	25.28	66.50	.48	1.92	100.00

TABLE 30 SNAKE RIVER APPORTIONED CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

	42	52	53	62	63	73	TOTAL
CATCH							
MALES							
NUMBER	922	755	318	--	80	--	2,075
PERCENT	44.43	36.39	15.32	.00	3.86	.00	63.01
FEMALES							
NUMBER	769	272	144	--	33	--	1,218
PERCENT	63.14	22.33	11.82	.00	2.71	.00	36.99
SEXES COMBINED							
NUMBER	1,691	1,027	462	--	113	--	3,293
PERCENT	51.35	31.19	14.03	.00	3.43	.00	100.00
146							
ESCAPEMENT							
MALES							
NUMBER	4,288	3,512	1,478	37	259	74	9,648
PERCENT	44.44	36.40	15.32	.38	2.69	.77	63.20
FEMALES							
NUMBER	3,548	1,257	665	--	148	--	5,618
PERCENT	63.15	22.38	11.84	.00	2.63	.00	36.80
SEXES COMBINED							
NUMBER	7,836	4,769	2,143	37	407	74	15,266
PERCENT	51.33	31.24	14.04	.24	2.67	.48	100.00
CATCH AND ESCAPEMENT							
MALES							
NUMBER	5,210	4,267	1,796	37	339	74	11,723
PERCENT	44.44	36.40	15.32	.32	2.89	.63	63.17
FEMALES							
NUMBER	4,317	1,529	806	--	181	--	6,836
PERCENT	63.15	22.37	11.83	.00	2.65	.00	36.83
SEXES COMBINED							
NUMBER	9,527	5,796	2,605	37	520	74	18,559
PERCENT	51.33	31.23	14.04	.20	2.80	.40	100.00

TABLE 31 WOOD RIVER APPORTIONED CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

			AGE GROUP				TOTAL
	31	42	52	53	62	63	
CATCH							
MALES							
NUMBER	--	143,506	34,152	22,710	--	2,118	202,486
PERCENT	.00	70.87	16.87	11.21	.00	1.05	47.90
FEMALES							
NUMBER	--	157,557	30,773	31,069	274	534	220,207
PERCENT	.00	71.55	13.98	14.11	.12	.24	52.10
SEXES COMBINED							
NUMBER	--	301,063	64,925	53,779	274	2,652	422,693
PERCENT	.00	71.23	15.36	12.72	.06	.63	100.00
ESCAPEMENT							
MALES							
NUMBER	--	493,748	143,372	56,877	--	11,946	705,943
PERCENT	.00	69.94	20.31	8.06	.00	1.69	41.31
FEMALES							
NUMBER	1,707	711,033	186,621	97,843	3,415	2,274	1,002,893
PERCENT	.17	70.90	18.61	9.75	.34	.23	58.69
SEXES COMBINED							
NUMBER	1,707	1,204,781	329,993	154,720	3,415	14,220	1,708,836
PERCENT	.10	70.50	19.31	9.06	.20	.83	100.00
CATCH AND ESCAPEMENT							
MALES							
NUMBER	--	637,254	177,524	79,587	--	14,064	908,429
PERCENT	.00	70.15	19.54	8.76	.00	1.55	42.62
FEMALES							
NUMBER	1,707	868,590	217,394	126,912	3,689	2,808	1,223,100
PERCENT	.14	71.02	17.77	10.54	.30	.23	57.38
SEXES COMBINED							
NUMBER	1,707	1,505,844	394,918	206,499	3,689	16,872	2,131,529
PERCENT	.08	70.65	18.53	9.78	.17	.79	100.00

TABLE 32 NUSHAGAK-MULCHATNA RIVER APPORTIONED CATCH AND ESTIMATED ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

	31	41	42	43	AGE GROUP 51	52	53	62	63	TOTAL
CATCH MALES NUMBER PERCENT	1,463 35.90	599 14.70	904 22.19	-- .00	-- .00	-- .00	124 3.04	635 15.58	350 8.59	4,075 73.12
FEMALES NUMBER PERCENT	-- .00	-- .00	600 40.05	-- .00	-- .00	326 21.76	430 28.71	80 5.34	62 4.14	1,498 26.88
SEXES COMBINED NUMBER PERCENT	1,463 26.25	599 10.75	1,504 26.99	-- .00	-- .00	326 5.85	554 9.94	715 12.83	412 7.39	5,573 100.00
ESCAPEMENT MALES NUMBER PERCENT	161 .95	2,994 17.70	6,777 40.06	-- .00	2,002 11.83	380 2.25	615 3.63	2,002 11.83	1,988 11.75	16,919 56.40
FEMALES NUMBER PERCENT	-- .00	3,875 29.62	1,200 9.18	498 3.81	2,483 18.98	1,251 9.56	1,201 9.18	1,823 13.94	750 5.73	13,081 43.60
SEXES COMBINED NUMBER PERCENT	161 .54	6,869 22.89	7,977 26.59	498 1.66	4,485 14.95	1,631 5.44	1,816 6.05	3,825 12.75	2,738 9.13	30,000 100.00
CATCH AND ESCAPEMENT MALES NUMBER PERCENT	1,624 7.73	3,593 17.11	7,681 36.59	-- .00	2,002 9.54	380 1.81	739 3.52	2,637 12.56	2,338 11.14	20,994 59.02
FEMALES NUMBER PERCENT	-- .00	3,875 26.58	1,800 12.35	498 3.41	2,483 17.03	1,577 10.82	1,631 11.19	1,903 13.05	812 5.57	14,579 40.98
SEXES COMBINED NUMBER PERCENT	1,624 4.57	7,468 20.99	9,481 26.65	498 1.40	4,485 12.61	1,957 5.50	2,370 6.66	4,540 12.76	3,150 8.86	35,573 100.00

NOTE: THE ESCAPEMENT COUNTS IN THIS TABLE ARE BASED UPON ESTIMATED ESCAPEMENTS TO THE NUSHAGAK-MULCHATNA RIVER SYSTEM.
THESE ESTIMATES ARE TAKEN FROM TABLE A-2.

TABLE 33 NUYAKUK RIVER APPORTIONED CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

					AGE GROUP				TOTAL
	31	41	42	51	52	53	62	63	
CATCH									
MALES									
NUMBER	--	105	6,312	--	4,439	1,016	--	87	11,959
PERCENT	.00	.88	52.78	.00	37.12	8.49	.00	.73	69.65
FEMALES									
NUMBER	--	--	2,439	--	1,432	945	73	321	5,210
PERCENT	.03	.00	46.81	.00	27.49	18.14	1.40	6.16	30.35
SEXES COMBINED									
NUMBER	--	105	8,751	--	5,871	1,961	73	408	17,169
PERCENT	.00	.61	50.97	.00	34.20	11.42	.42	2.38	100.00
ESCAPEMENT									
MALES									
NUMBER	524	786	35,116	--	27,254	3,669	--	786	68,135
PERCENT	.77	1.15	51.54	.00	40.00	5.39	.00	1.15	44.07
FEMALES									
NUMBER	--	262	41,667	524	32,757	6,552	1,048	3,669	66,479
PERCENT	.00	.30	48.18	.61	37.88	7.58	1.21	4.24	55.93
SEXES COMBINED									
NUMBER	524	1,048	76,783	524	60,011	10,221	1,048	4,455	154,614
PERCENT	.34	.68	49.66	.34	38.31	6.61	.68	2.88	100.00
CATCH AND ESCAPEMENT									
MALES									
NUMBER	524	891	41,428	--	31,693	4,685	--	873	80,094
PERCENT	.66	1.11	51.72	.00	39.57	5.85	.00	1.09	46.63
FEMALES									
NUMBER	--	262	44,106	524	34,199	7,497	1,121	3,990	91,689
PERCENT	.00	.29	48.10	.57	37.29	8.18	1.22	4.35	53.37
SEXES COMBINED									
NUMBER	524	1,153	85,534	524	65,882	12,182	1,121	4,863	171,783
PERCENT	.31	.67	49.79	.31	38.35	7.09	.65	2.83	100.00

TABLE 34 NUSHAGAK-IGUSHIK DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		NUMBER IN CATCH	
			MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
1	06/01-07/07	453	221	232	48.79	51.21	199,605	97,379
2	07/08-08/17	396	195	201	49.24	50.76	289,558	142,585
TOTAL		849	416	433	49.06	50.94	489,163	239,964
								249,199

TABLE 35 NUSHAGAK-IGUSHIK DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP							TOTAL
			31	41	42	52	53	62	63	
MALES										
1	06/01-	COUNT	--	--	59,619	12,778	13,660	--	1,322	97,379
	07/07	PERCENT	.00	.00	71.49	13.12	14.03	.00	1.36	40.58
2	07/08-	COUNT	1,463	731	82,626	31,442	24,130	731	1,462	142,585
	08/17	PERCENT	1.03	.51	57.95	22.05	16.92	.51	1.03	59.42
COLUMN TOTALS		COUNT	1,463	731	152,245	44,220	37,790	731	2,784	239,964
		PERCENT	.61	.30	63.45	18.43	15.75	.30	1.16	100.00
FEMALES										
1	06/01-	COUNT	--	--	66,976	18,506	14,981	441	1,322	102,226
	07/07	PERCENT	.00	.00	65.52	18.10	14.66	.43	1.29	41.02
2	07/08-	COUNT	--	--	95,788	16,818	34,367	--	--	146,973
	08/17	PERCENT	.00	.00	65.17	11.44	23.38	.00	.00	58.98
COLUMN TOTALS		COUNT	--	--	162,764	35,324	49,348	441	1,322	249,199
		PERCENT	.00	.00	65.31	14.18	19.80	.18	.53	100.00
SEXES COMBINED										
1	06/01-	COUNT	--	--	136,595	31,284	28,641	441	2,644	199,605
	07/07	PERCENT	.00	.00	68.43	15.67	14.35	.22	1.33	40.81
2	07/08-	COUNT	1,463	731	178,414	48,260	58,497	731	1,462	289,558
	08/17	PERCENT	.51	.25	61.62	16.67	20.20	.25	.50	59.19
COLUMN TOTALS		COUNT	1,463	731	315,009	79,544	87,138	1,172	4,106	489,163
		PERCENT	.30	.15	64.40	16.26	17.81	.24	.84	100.00

TABLE 36 IGUSHIK BEACH SUB-DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		CATCH	NUMBER IN CATCH	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	07/11-07/12	108	56	52	51.85	48.15	21,408	11,100	10,308

TABLE 37 IGUSHIK BEACH SUB-DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE	AGE GROUP				TOTAL	
		42	52	53	63		
MALES							
1	07/11-	COUNT	991	1,189	8,920	--	11,100
	07/12	PERCENT	8.93	10.71	80.36	.00	100.00
FEMALES							
1	07/11-	COUNT	397	793	8,920	198	10,308
	07/12	PERCENT	3.85	7.69	86.54	1.92	100.00
SEXES COMBINED							
1	07/11-	COUNT	1,388	1,982	17,460	198	21,408
	07/12	PERCENT	6.48	9.26	83.33	.93	100.00

TABLE 38 IGUSHIK RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 22	108	108	.03	.03
23	0	108	.00	.03
24	480	588	.13	.16
25	354	942	.10	.26
26	456	1,398	.13	.39
27	816	2,214	.23	.62
28	1,266	3,480	.35	.97
29	1,260	4,740	.35	1.32
30	1,224	5,964	.34	1.66
JULY 1	2,700	8,664	.75	2.41
2	6,486	15,150	1.81	4.22
3	14,802	29,952	4.13	8.35
4	21,702	51,654	6.05	14.40
5	36,150	87,804	10.08	24.48
6	49,548	137,352	13.81	38.29
7	45,834	183,186	12.77	51.06
8	39,384	222,570	10.98	62.04
9	20,028	242,598	5.58	67.62
10	16,830	259,428	4.69	72.31
11	12,582	272,010	3.51	75.82
12	16,956	288,966	4.73	80.55
13	14,922	303,888	4.16	84.71
14	10,770	314,658	3.00	87.71
15	7,068	321,726	1.97	89.68
16	6,282	328,008	1.75	91.43
17	6,132	334,140	1.71	93.14
18	6,216	340,356	1.73	94.87
19	7,074	347,430	1.97	96.84
20	4,446	351,876	1.24	98.08
21	2,376	354,252	.66	98.74
22	1,530	355,782	.43	99.17
23	1,674	357,456	.47	99.64
24	1,176	358,632	.33	99.97
25	120	358,752	.03	100.00

TABLE 39 IGUSHIK RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/22-07/06	302	137	165	45.36	54.64	137,352	62,309	75,043
2	07/07-07/25	467	254	213	54.39	45.61	221,400	120,419	100,981
TOTAL		769	391	378	50.93	49.07	358,752	182,728	176,024

TABLE 40 IGUSHIK RIVER ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP						TOTAL
			41	42	52	53	62	63	
MALES									
1	06/22- 07/06	COUNT PERCENT	-- .00	2,729 4.38	24,560 39.42	33,656 54.01	-- .00	1,364 2.19	62,309 34.10
2	07/07- 07/25	COUNT PERCENT	474 .39	3,793 3.15	37,927 31.50	75,381 62.60	1,422 1.18	1,422 1.18	120,419 65.90
COLUMN TOTALS		COUNT PERCENT	474 .26	6,522 3.57	62,487 34.20	109,037 59.67	1,422 .78	2,786 1.52	182,728 100.00
FEMALES									
1	06/22- 07/06	COUNT PERCENT	-- .00	3,638 4.85	15,009 20.00	52,758 70.30	-- .00	3,638 4.85	75,043 42.63
2	07/07- 07/25	COUNT PERCENT	-- .00	10,430 10.33	19,438 19.25	69,691 69.01	474 .47	948 .94	100,981 57.37
COLUMN TOTALS		COUNT PERCENT	-- .00	14,068 7.99	34,447 19.57	122,449 69.56	474 .27	4,586 2.61	176,024 100.00
SEXES COMBINED									
1	06/22- 07/06	COUNT PERCENT	-- .00	6,367 4.54	39,569 28.81	86,414 62.91	-- .00	5,002 3.64	137,352 38.29
2	07/07- 07/25	COUNT PERCENT	474 .21	14,223 6.42	57,365 25.91	145,072 65.53	1,896 .86	2,370 1.07	221,400 61.71
COLUMN TOTALS		COUNT PERCENT	474 .13	20,590 5.74	96,934 27.02	231,486 64.53	1,896 .53	7,372 2.05	358,752 100.00

TABLE 41 SNAKE RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 25	0	0	.00	.00
26	0	0	.00	.00
27	1	1	.01	.01
28	4	5	.03	.04
29	0	5	.00	.04
30	0	5	.00	.04
JULY 1	0	5	.00	.04
2	0	5	.00	.04
3	1	6	.01	.05
4	619	625	4.05	4.10
5	266	891	1.74	5.84
6	4,269	5,160	27.96	33.80
7	1,988	7,148	13.02	46.82
8	2,512	9,660	16.46	63.28
9	1,344	11,004	8.80	72.08
10	964	11,968	6.31	78.39
11	667	12,635	4.37	82.76
12	41	12,676	.27	83.03
13	1	12,677	.01	83.04
14	512	13,189	3.35	86.39
15	244	13,433	1.60	87.99
16	562	13,995	3.68	91.67
17	274	14,269	1.80	93.47
18	150	14,419	.98	94.45
19	200	14,619	1.31	95.76
20	200	14,819	1.31	97.07
21	54	14,873	.35	97.42
22	99	14,972	.65	98.07
23	14	14,986	.09	98.16
24	16	15,002	.10	98.26
25	5	15,007	.03	98.29
26	7	15,014	.05	98.34
27	0	15,014	.00	98.34
28	0	15,014	.00	98.34
29	0	15,014	.00	98.34
30	0	15,014	.00	98.34
31	85	15,099	.56	98.90
AUG. 1	14	15,113	.09	98.99
2	21	15,134	.14	99.13
3	2	15,136	.01	99.14
4	0	15,136	.00	99.14
5	1	15,137	.01	99.15
6	0	15,137	.00	99.15
7	0	15,137	.00	99.15
8	0	15,137	.00	99.15
9	0	15,137	.00	99.15
10	0	15,137	.00	99.15
11	0	15,137	.00	99.15

(CONTINUED)

TABLE 41 SNAKE RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS 1974 (CONTINUED)

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
AUG. 12	0	15,137	.00	99.15
13	0	15,137	.00	99.15
14	0	15,137	.00	99.15
15	16	15,153	.10	99.25
16	32	15,185	.21	99.46
17	20	15,205	.13	99.59
18	10	15,215	.07	99.66
19	8	15,223	.05	99.71
20	9	15,232	.06	99.77
21	0	15,232	.00	99.77
22	5	15,237	.03	99.80
23	0	15,237	.00	99.80
24	3	15,240	.02	99.82
25	8	15,248	.05	99.87
26	0	15,248	.00	99.87
27	0	15,248	.00	99.87
28	0	15,248	.00	99.87
29	0	15,248	.00	99.87
30	0	15,248	.00	99.87
31	3	15,251	.02	99.89
SEPT 1	0	15,251	.00	99.89
2	3	15,254	.02	99.91
3	4	15,258	.03	99.94
4	0	15,258	.00	99.94
5	5	15,263	.03	99.97
6	0	15,263	.00	99.97
7	0	15,263	.00	99.97
8	0	15,263	.00	99.97
9	0	15,263	.00	99.97
10	0	15,263	.00	99.97
11	1	15,264	.01	99.98
12	0	15,264	.00	99.98
13	0	15,264	.00	99.98
14	0	15,264	.00	99.98
15	0	15,264	.00	99.98
16	0	15,264	.00	99.98
17	0	15,264	.00	99.98
18	0	15,264	.00	99.98
19	0	15,264	.00	99.98
20	0	15,264	.00	99.98
21	0	15,264	.00	99.98
22	1	15,265	.01	99.99
23	0	15,265	.00	99.99
24	0	15,265	.00	99.99
25	0	15,265	.00	99.99
26	1	15,266	.01	100.00

TABLE 42 SNAKE RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/25-09/26	413	261	152	63.20	36.80	15,266	9,648	5,618

TABLE 43 WOOD RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 20	132	132	.01	.01
21	858	990	.05	.06
22	354	1,344	.02	.08
23	1,188	2,532	.07	.15
24	774	3,306	.04	.19
25	2,112	5,418	.12	.31
26	1,470	6,888	.09	.40
27	1,110	7,998	.06	.46
28	1,422	9,420	.08	.54
29	5,172	14,592	.30	.84
30	109,668	124,260	6.42	7.26
JULY 1	162,744	287,004	9.52	16.78
2	271,206	558,210	15.87	32.65
3	275,082	833,292	16.10	48.75
4	340,332	1,173,624	19.92	68.67
5	187,026	1,360,650	10.94	79.61
6	123,630	1,484,280	7.23	86.84
7	53,106	1,537,386	3.11	89.95
8	36,378	1,573,764	2.13	92.08
9	27,354	1,601,118	1.60	93.68
10	19,494	1,620,612	1.14	94.82
11	17,736	1,638,348	1.04	95.86
12	12,072	1,650,420	.71	96.57
13	5,562	1,655,982	.33	96.90
14	6,084	1,662,066	.36	97.26
15	7,698	1,669,764	.45	97.71
16	5,748	1,675,512	.34	98.05
17	6,150	1,681,662	.36	98.41
18	5,442	1,687,104	.32	98.73
19	2,784	1,689,888	.16	98.89
20	1,368	1,691,256	.08	98.97
21	3,936	1,695,192	.23	99.20
22	594	1,695,786	.03	99.23
23	1,656	1,697,442	.10	99.33
24	2,064	1,699,506	.12	99.45
25	2,904	1,702,410	.17	99.62
26	1,134	1,703,544	.07	99.69
27	3,012	1,706,556	.18	99.87
28	1,260	1,707,816	.07	99.94
29	918	1,708,734	.05	99.99
30	102	1,708,836	.01	100.00

TABLE 44 WOOD RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/20-07/03	488	199	289	40.78	59.22	833,292	339,806	493,486
2	07/04-07/30	385	161	224	41.82	58.18	875,544	366,137	509,407
TOTAL		873	360	513	41.31	58.69	1,708,836	705,943	1,002,893

TABLE 45 WOOD RIVER ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP						TOTAL
			31	42	52	53	62	63	
MALES									
1	06/20- 07/03	COUNT PERCENT	-- .00	225,399 66.33	88,793 26.13	20,491 6.03	-- .00	5,123 1.51	339,806 48.14
2	07/04- 07/30	COUNT PERCENT	-- .00	268,349 73.29	54,579 14.91	36,386 9.94	-- .00	6,823 1.86	366,137 51.86
COLUMN TOTALS		COUNT PERCENT	-- .00	493,748 69.94	143,372 20.31	56,877 8.06	-- .00	11,946 1.69	705,943 100.00
FEMALES									
1	06/20- 07/03	COUNT PERCENT	1,707 .35	317,607 64.36	122,945 24.91	47,812 9.69	3,415 .69	-- .00	493,486 49.21
2	07/04- 07/30	COUNT PERCENT	-- .00	393,426 77.23	63,676 12.50	50,031 9.82	-- .00	2,274 .45	509,407 50.79
COLUMN TOTALS		COUNT PERCENT	1,707 .17	711,033 70.90	186,621 16.61	97,843 9.75	3,415 .34	2,274 .23	1,002,893 100.00
SEXES COMBINED									
1	06/20- 07/03	COUNT PERCENT	1,707 .21	543,006 65.16	211,738 25.41	68,303 8.20	3,415 .41	5,123 .61	833,292 48.76
2	07/04- 07/30	COUNT PERCENT	-- .00	661,775 75.58	118,255 13.51	86,417 9.87	-- .00	9,097 1.04	875,544 51.24
COLUMN TOTALS		COUNT PERCENT	1,707 .10	1,204,781 70.50	329,993 19.31	154,720 9.06	3,415 .20	14,220 .83	1,708,836 100.00

TABLE 46 NUSHAGAK-MULCHATNA TOWER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	07/03-07/08	239	122	117	51.05	48.95	184,614	94,238	90,376

NOTE: THIS ESCAPEMENT SAMPLING WAS TAKEN AT THE NUSHAGAK-MULCHATNA TOWER, WHICH WAS LOCATED DOWNSTREAM FROM THE MOUTH OF THE NYAKUK RIVER. THUS THIS SAMPLING INCLUDES FISH RETURNING TO BOTH THE NYAKUK AND NUSHAGAK-MULCHATNA RIVER SYSTEMS. REFER TO TABLE A-1 FOR THE AGE BY SEX COMPOSITION OF THE FISH SAMPLED AT THE NUSHAGAK-MULCHATNA TOWER. REFER TO TABLE A-2 FOR THE AGE BY SEX COMPOSITION OF THE ESTIMATED ESCAPEMENT TO THE NUSHAGAK-MULCHATNA RIVER SYSTEM.

TABLE 47 NUYAKUK RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JULY 1	108	108	.07	.07
2	180	288	.12	.19
3	1,350	1,638	.87	1.06
4	12,714	14,352	8.22	9.28
5	22,860	37,212	14.78	24.06
6	19,338	56,550	12.51	36.57
7	17,802	74,352	11.51	48.08
8	19,080	93,432	12.34	60.42
9	21,024	114,456	13.60	74.02
10	15,402	129,858	9.96	83.98
11	9,096	138,954	5.88	89.86
12	4,206	143,160	2.72	92.58
13	1,944	145,104	1.26	93.84
14	984	146,088	.64	94.48
15	1,092	147,180	.71	95.19
16	1,146	148,326	.74	95.93
17	930	149,256	.60	96.53
18	846	150,102	.55	97.08
19	498	150,600	.32	97.40
20	336	150,936	.22	97.62
21	360	151,296	.23	97.85
22	384	151,680	.25	98.10
23	288	151,968	.19	98.29
24	330	152,298	.21	98.50
25	384	152,682	.25	98.75
26	210	152,892	.13	98.88
27	258	153,150	.17	99.05
28	252	153,402	.16	99.21
29	108	153,510	.07	99.28
30	216	153,726	.14	99.42
31	102	153,828	.07	99.49
AUG. 1	210	154,038	.14	99.63
2	162	154,200	.10	99.73
3	48	154,248	.03	99.76
4	60	154,308	.04	99.80
5	114	154,422	.07	99.87
6	120	154,542	.08	99.95
7	72	154,614	.05	100.00

TABLE 48 NUYAKUK RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	07/01-08/07	590	260	330	44.07	55.93	154,614	68,135	86,479

TOGIAK DISTRICT

The pre-season gear registration of 149 units was very close to the actual peak effort observed during the week July 1-6. Much of this effort was due to transfers from other districts. With a prolonged closure expected in the major districts of Bristol Bay during the sockeye season, additional fishing and processing effort was focused on the Togiak fishery.

A two day opening on July 1-3, brought the cumulative sockeye harvest for the district to 44,000 which was only 70% of the average catch by that date. Due to the poor showing, the Togiak and Kulukak sections were closed to fishing for 5 days between July 3-8. On July 8, an aerial survey of the river showed an improved escapement rate and prompted a decision to allow a three day opening on July 9-12. Catches were poor and were still lagged behind long term averages at that time.

Escapement rates failed to pick up and an additional closure from July 17-22 was imposed on the district. Although an extension of the closure through July 29 seemed imminent, a more favorable survey on July 22 permitted a reverse of this and an opening of the district was announced for July 22-27.

Final sockeye catches for the district were 139,341 which is about average for this species. Final sockeye escapement into Togiak River and tributaries was 103,000 and the escapement goal for the district was achieved. The age composition of the Togiak River sockeye run was 25% 4-year fish, 68% 5-year fish, and 7% 6-year fish.

The commercial catch of chum and king salmon fell short of the 20-year average for these species while catches of pink and coho were above average.

(Shaded areas are fishing districts.
Scale: 1 inch = 10 miles)

-67-

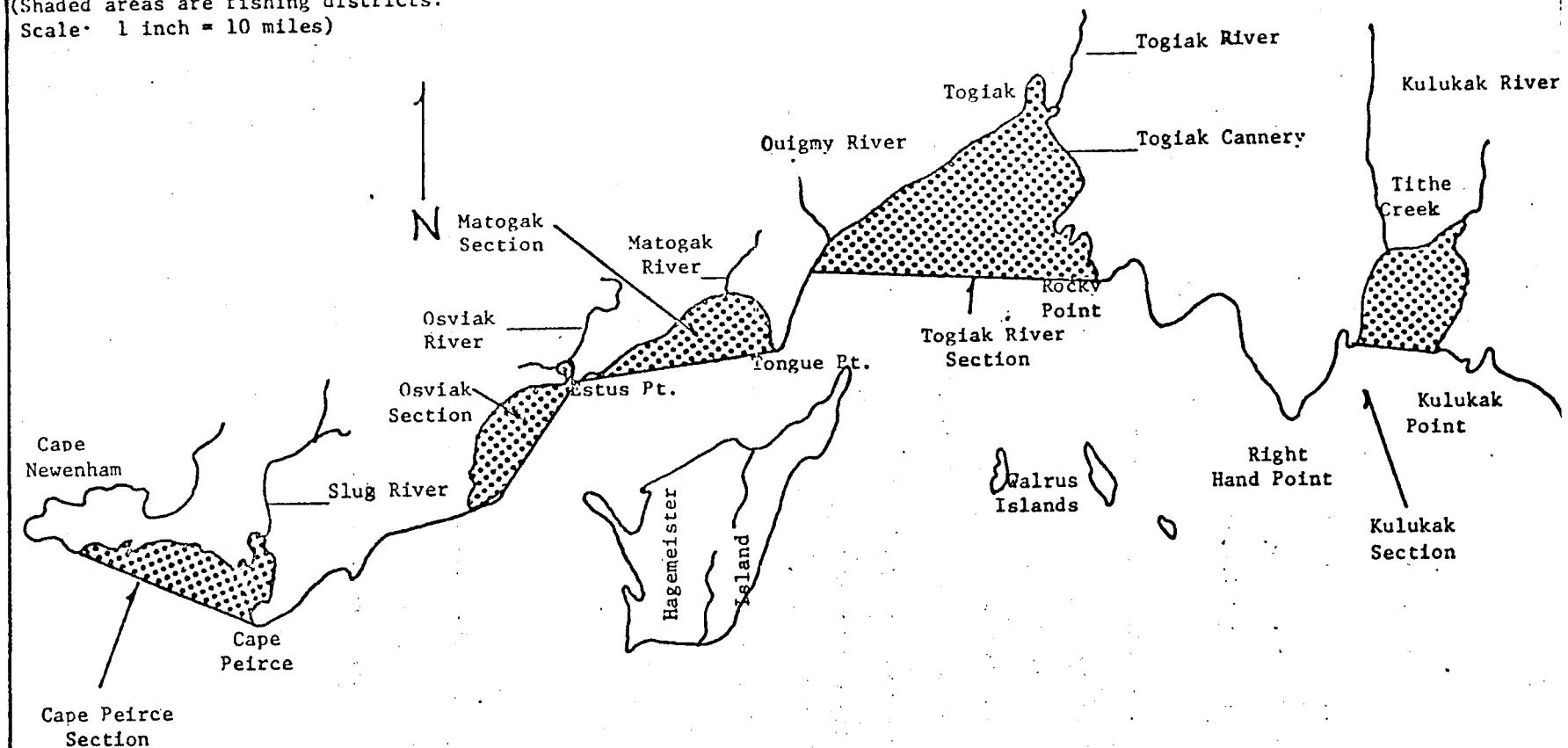


Figure 6. Togiak District commercial fishing boundaries, 1974.

TABLE 49 TOGIAK RIVER CATCH AND ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

					AGE GROUP				TOTAL
	31	41	42	52	53	62	63	73	
CATCH									
MALES									
NUMBER	156	245	14,192	31,388	11,005	1,152	3,105	--	61,243
PERCENT	.26	.40	23.17	51.25	17.97	1.88	5.07	.00	43.95
FEMALES									
NUMBER	70	561	18,622	42,808	10,288	1,083	4,601	.65	78,098
PERCENT	.09	.72	23.85	54.81	13.17	1.39	5.89	.08	56.05
SEXES COMBINED									
NUMBER	226	806	32,814	74,196	21,293	2,235	7,706	.65	139,341
PERCENT	.16	.58	23.55	53.25	15.28	1.60	5.53	.05	100.00
ESCAPEMENT									
MALES									
NUMBER	--	241	11,948	28,742	4,263	314	2,843	--	48,351
PERCENT	.00	.50	24.71	59.44	8.82	.65	5.88	.00	58.26
FEMALES									
NUMBER	--	96	9,108	22,257	1,562	337	1,181	--	34,641
PERCENT	.00	.28	26.29	64.25	4.80	.97	3.41	.00	41.74
SEXES COMBINED									
NUMBER	--	337	21,056	50,999	5,925	651	4,024	--	82,992
PERCENT	.00	.41	25.37	61.45	7.14	.78	4.85	.00	100.00
CATCH AND ESCAPEMENT									
MALES									
NUMBER	156	486	26,140	60,130	15,268	1,466	5,948	--	109,594
PERCENT	.14	.44	23.85	54.87	13.93	1.34	5.43	.00	49.29
FEMALES									
NUMBER	70	657	27,730	65,065	11,950	1,420	5,782	.65	112,739
PERCENT	.06	.58	24.60	57.71	10.60	1.26	5.13	.06	50.71
SEXES COMBINED									
NUMBER	226	1,143	53,870	125,195	27,218	2,886	11,730	.65	222,333
PERCENT	.10	.51	24.23	56.31	12.24	1.30	5.28	.03	100.00

TABLE 50 TOGIAK DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		CATCH	NUMBER IN CATCH	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	06/19-06/28	626	262	364	41.85	58.15	22,737	9,516	13,221
2	07/02-07/03	520	206	314	39.62	60.38	36,167	14,328	21,839
3	07/10-07/11	517	237	280	45.84	54.16	33,759	15,476	18,283
4	07/23-07/27	511	240	271	46.97	53.03	46,678	21,923	24,755
TOTAL		2,174	945	1,229	43.95	56.05	139,341	61,243	78,098

TABLE 51 TOGIAK DISTRICT COMMERCIAL CATCH OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD MALES	DATE	AGE GROUP								TOTAL	
		31	41	42	52	53	62	63	73		
1	06/19-	COUNT	--	36	835	7,809	254	400	182	--	9,516
	06/28	PERCENT	.00	.38	8.78	82.06	2.67	4.20	1.91	.00	15.54
2	07/02-	COUNT	--	209	2,574	10,224	348	556	417	--	14,328
	07/03	PERCENT	.00	1.46	17.96	71.36	2.43	3.88	2.91	.00	23.39
3	07/10-	COUNT	65	--	5,485	7,052	2,090	196	588	--	15,476
	07/11	PERCENT	.42	.00	35.44	49.57	13.50	1.27	3.60	.00	25.27
4	07/23-	COUNT	91	--	5,298	6,303	8,313	--	1,918	--	21,923
	07/27	PERCENT	.42	.00	24.17	28.75	37.92	.00	8.75	.00	35.80
COLUMN TOTALS		COUNT	156	245	14,192	31,388	11,005	1,152	3,105	--	61,243
		PERCENT	.26	.40	23.17	51.25	17.97	1.88	5.07	.00	100.00
FEMALES											
1	06/19-	COUNT	--	218	581	11,659	109	400	254	--	13,221
	06/28	PERCENT	.00	1.65	4.40	88.19	.82	3.02	1.92	.00	16.93
2	07/02-	COUNT	70	278	2,156	17,805	417	487	626	--	21,839
	07/03	PERCENT	.32	1.27	9.87	81.53	1.91	2.23	2.87	.00	27.96
3	07/10-	COUNT	--	65	5,746	9,590	1,175	196	1,437	.65	18,283
	07/11	PERCENT	.00	.36	31.43	52.50	6.43	1.07	7.86	.36	23.41
4	07/23-	COUNT	--	--	10,139	3,745	8,587	--	2,284	--	24,755
	07/27	PERCENT	.00	.00	40.96	15.13	34.69	.00	9.23	.00	31.70
COLUMN TOTALS		COUNT	70	561	18,622	42,808	10,288	1,083	4,601	.65	78,098
		PERCENT	.09	.72	23.85	54.81	13.17	1.39	5.89	.08	100.00
SEXES COMBINED											
1	06/19-	COUNT	--	254	1,416	19,468	363	800	436	--	22,737
	06/28	PERCENT	.00	1.12	6.23	85.62	1.59	3.52	1.92	.00	16.32
2	07/02-	COUNT	70	487	4,730	28,029	765	1,043	1,043	--	36,167
	07/03	PERCENT	.19	1.35	13.08	77.50	2.12	2.88	2.88	.00	25.95
3	07/10-	COUNT	65	65	11,231	16,651	3,265	392	2,025	.65	33,759
	07/11	PERCENT	.19	.19	33.27	49.33	9.67	1.16	6.00	.19	24.23
4	07/23-	COUNT	91	--	15,437	10,048	16,900	--	4,202	--	46,678
	07/27	PERCENT	.19	.00	33.07	21.53	36.21	.00	9.00	.00	33.50
COLUMN TOTALS		COUNT	226	806	32,814	74,196	21,293	2,235	7,706	.65	139,341
		PERCENT	.16	.58	23.55	53.25	15.28	1.60	5.53	.05	100.00

TABLE 52 TOGIAK RIVER DAILY SOCKEYE SALMON
ESCAPEMENT COUNTS, 1974

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JULY 1	606	606	.73	.73
2	2,526	3,132	3.04	3.77
3	1,236	4,368	1.49	5.26
4	342	4,710	.41	5.67
5	1,830	6,540	2.20	7.87
6	1,068	7,608	1.29	9.16
7	7,344	14,952	8.85	18.01
8	5,022	19,974	6.05	24.06
9	3,144	23,118	3.79	27.85
10	4,176	27,294	5.03	32.88
11	6,180	33,474	7.45	40.33
12	4,428	37,902	5.34	45.67
13	3,726	41,628	4.49	50.16
14	2,706	44,334	3.26	53.42
15	1,914	46,248	2.31	55.73
16	2,094	48,342	2.52	58.25
17	3,456	51,798	4.16	62.41
18	2,310	54,108	2.78	65.19
19	2,712	56,820	3.27	68.46
20	6,702	63,522	8.08	76.54
21	4,578	68,100	5.52	82.06
22	3,246	71,346	3.91	85.97
23	3,990	75,336	4.81	90.78
24	2,388	77,724	2.88	93.66
25	2,718	80,442	3.27	96.93
26	1,806	82,248	2.18	99.11
27	384	82,632	.46	99.57
28	-288	82,344	-.35	99.22
29	492	82,836	.59	99.81
30	-366	82,470	-.44	99.37
31	-192	82,278	-.23	99.14
AUG. 1	426	82,704	.51	99.65
2	198	82,902	.24	99.89
3	90	82,992	.11	100.00

TABLE 53 TOGIAK RIVER ESCAPEMENT OF SOCKEYE SALMON, SEX COMPOSITION BY SAMPLE PERIOD, 1974

PERIOD NUMBER	DATE	NO. OF FISH SAMPLED	COUNT		PERCENT		ESCAPEMENT	NUMBER IN ESCAPEMENT	
			MALES	FEMALES	MALES	FEMALES		MALES	FEMALES
1	07/01-07/15	383	218	165	56.92	43.08	46,248	26,324	19,924
2	07/16-08/03	382	229	153	59.95	40.05	36,744	22,027	14,717
TOTAL		765	447	318	58.26	41.74	82,992	48,351	34,641

TABLE 54 TOGIAK RIVER ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP						TOTAL
			41	42	52	53	62	63	
MALES									
1	07/01- 07/15	COUNT PERCENT	241 .92	4,830 18.35	18,354 69.72	1,570 5.96	121 .46	1,208 4.59	26,324 54.44
2	07/16- 08/03	COUNT PERCENT	-- .00	7,118 32.31	10,388 47.16	2,693 12.23	193 .87	1,635 7.42	22,027 45.56
COLUMN TOTALS		COUNT PERCENT	241 .50	11,948 24.71	28,742 59.44	4,263 6.82	314 .65	2,843 5.88	48,351 100.00
FEMALES									
1	07/01- 07/15	COUNT PERCENT	-- .00	4,106 20.61	14,369 72.12	604 3.03	242 1.21	604 3.03	19,924 57.52
2	07/16- 08/03	COUNT PERCENT	96 .65	5,002 33.99	7,888 53.59	1,058 7.19	96 .65	577 3.92	14,717 42.48
COLUMN TOTALS		COUNT PERCENT	96 .28	9,108 26.29	22,257 64.25	1,662 4.80	337 .97	1,181 3.41	34,641 100.00
SEXES COMBINED									
1	07/01- 07/15	COUNT PERCENT	241 .52	8,936 19.32	32,723 70.76	2,174 4.70	362 .78	1,812 3.92	46,248 55.73
2	07/16- 08/03	COUNT PERCENT	96 .26	12,120 32.98	18,276 49.74	3,751 10.21	289 .79	2,212 6.02	36,744 44.27
COLUMN TOTALS		COUNT PERCENT	337 .41	21,056 25.37	50,999 61.45	5,925 7.14	651 .78	4,024 4.85	82,992 100.00

1731

Table 55. Mean weights and sample sizes in the catch by district by ocean age, 1974.

DISTRICT	OCEAN AGE				Total
	1	2	3	4	
Naknek Section					
Males	x= -	5.46	6.62	-	5.59
	n= -	83	11	-	94
Females	x= -	4.91	6.30	-	5.10
	n= -	45	7	-	52
Egegik					
Males	x= -	5.61	8.17	-	5.96
	n= -	101	23	-	124
Females	x= -	4.91	6.47	-	5.54
	n= -	39	27	-	66
Ugashik^{1/}					
Males	x= 2.20	5.80	8.27	-	6.09
	n= 6	136	26	-	168
Females	x= -	4.75	6.47	7.70	4.92
	n= -	154	15	1	170
Nushagak					
Males	x= -	5.51	7.38	-	5.75
	n= -	107	16	-	123
Females	x= -	4.83	6.58	7.80	5.26
	n= -	103	32	1	136
Togiak					
Males	x= -	6.53	9.00	9.93	7.63
	n= -	82	107	9	198
Females	x= -	5.31	6.99	7.35	6.54
	n= -	88	230	7	325

^{1/} Mean weights are from tower samples since no catch sampling data is available for the Ugashik district.

LITERATURE CITED

McCurdy, M.L. and T.R. Schroeder, 1972. Bristol Bay Sockeye Salmon (Oncorhynchus nerka) 1971. A compilation of catch and escapement data. Alaska Department of Fish and Game Technical Data Report No. 7, p.102.

APPENDIX

TABLE A-1 NUSHAGAK-MULCHATNA TOWER ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SAMPLE PERIOD AND SEX,
NUMBER AND PERCENT, 1974

SAMPLE PERIOD	DATE		AGE GROUP									TOTAL
			31	41	42	43	51	52	53	62	63	
		MALES										
1	07/03-	COUNT	772	5,407	45,574	--	3,090	27,808	4,635	3,090	3,862	94,238
	07/08	PERCENT	.82	5.74	48.36	.00	3.28	29.51	4.92	3.28	4.10	100.00
		FEMALES										
1	07/03-	COUNT	--	6,180	32,443	772	7,724	26,263	10,042	3,862	3,090	90,376
	07/08	PERCENT	.00	6.64	35.90	.85	8.55	29.06	11.11	4.27	3.42	100.00
		SEXES COMBINED										
1	07/03-	COUNT	772	11,587	78,017	772	10,814	54,071	14,677	6,952	6,952	184,614
	07/08	PERCENT	.42	6.28	42.26	.42	5.86	29.29	7.95	3.76	3.76	100.00

NOTE: THIS TABULATION IS FOR THE NUSHAGAK-MULCHATNA TOWER, NOT FOR THE NUSHAGAK-MULCHATNA RIVER SYSTEM. REFER TO TABLE A-2 FOR THE ESTIMATED AGE BY SEX COMPOSITION OF THE ESCAPEMENT TO THE RIVER SYSTEM.

TABLE A-2 NUSHAGAK-MULCHATNA RIVER SYSTEM ESTIMATED ESCAPEMENT OF SOCKEYE SALMON, AGE GROUP BY SEX, NUMBER AND PERCENT, 1974

	31	41	42	43	AGE GROUP 51	52	53	62	63	TOTAL
MALES										
COUNT	161	2,994	6,777	--	2,002	380	615	2,002	1,988	16,919
PERCENT	.95	17.70	40.06	.00	11.83	2.25	3.63	11.83	11.75	100.00
FEMALES										
COUNT	--	3,875	1,200	498	2,483	1,251	1,201	1,823	750	13,081
PERCENT	.00	29.62	9.18	3.81	18.98	9.56	9.18	13.94	5.73	100.00
SEXES COMBINED										
COUNT	161	6,869	7,977	498	4,485	1,631	1,816	3,825	2,738	30,000
PERCENT	.54	22.89	26.59	1.66	14.95	5.44	6.05	12.75	9.13	100.00

NOTE: THIS AGE BY SEX TABULATION IS AN ESTIMATE BASED UPON THE NUSHAGAK-MULCHATNA TOWER TABULATION SHOWN IN TABLE A-1, AND THE NYAKUK RIVER TABULATION SHOWN IN TABLE 33.

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